JOURNAL

AMERICAN VETERINARY MEDICAL ASSOCIATION

	(FIR .	-
In	Ihis	Issue

GENERAL ARTICLES

The San Francisco Session	
Veterinary Aspects of Atomic Explosion-Wayne O. Kester and Everett	
Miller	325
The Present Status of Penicillin in Veterinary Medicine-John H. Collins	
House of Representatives—Proceedings of San Francisco Session	385
Official Roster—1948-49	416

SURGERY AND OBSTETRICS

Stainless	Steel	Wire Used in Femur Fracture—R. J. Garbutt	335
Arabian	Twin	Fillies—H. Meade Hamilton	338

CLINICAL DATA

Verminous Aneurysm of the Anterior Mesenteric Artery in a Filly—Robert	
W. Davis and Glenwood P. Epling	
Differential Diagnosis and Specific Therapy of Dysenteries in Dogs-John	
E. Craige	
Traumatic Removal of Epiglottis and Uvula—W. C. Young	347
The Use of Sulfamethazine in the Treatment of Foot Rot, Metritis, and Calf	
Pneumonia—John D. Case	
Multiple Neoplasia with Metastasis in a Dog—Roscoe O. Sealy, Jr	352
Observations on Pathogenicity of Strongyloides Parasites in Ruminants-	
C. A. Woodhouse	354
Surital Sodium, a New Anesthetic and Hypnotic—T. F. Reutner and O. M.	

NUTRITION

Fat	Digestion										*	 					٠	 . ,						 3	60	į

EDITORIAL

Brucellosis	Eradication and the Practiti	oner	. 362
	Obstetrics335	Editorial	
	339	Current Literature	

(Contents continued on ad pages 2 and 4)

Proceedings Number — San Francisco



Journal

of the

American Veterinary Medical Association

Copyright 1948 by American Veterinary Medical Association 600 S. Michigan Ave., Chicago 5, Ill.

VOL. CXIII

OCTOBER, 1948

NO. 859

The San Francisco Session

Looking back at the preconvention forecasts of the Eighty-fifth Annual Meeting, it is now plain that all predictions about the oustanding potentialities of the San Francisco session were afflicted with underestimation. "The Golden Gate in '48" attracted the second greatest attendance in Association history—2,111. It ran a close second to the record-breaking meeting in Cincinnati last year. The five AVMA conventions with the highest official attendance figures now are:

1947—Cincinnati				0									.2,226
1948-San Francisc	co					٠	٠			0		0	.2,111
1940-Washington					0								.1,982
1941-Indianapolis		0	0			0	0	0 1					.1,946
1026 Columbus													1 050

The meeting was outstanding in all respects—in the scope and calibre of the scientific program, the diversity and quality of the entertainment for everybody, the friendly hospitality and good work of the Committee on Local Arrangements, the coöperation and courtesies of the state and local veterinary organizations and, not least by any means, the welcome experience of holding the convention in the incomparably comfortable and invigorating weather characteristic of San Francisco—as advertised.

The Committee on Local Arrangements merits special commendation for the good management of the convention under stresses imposed by the near-record attendance, which caused various functions to exceed by nearly 100 per cent the planning estimates which had allowed a 50 per cent overage, usually an ample working margin.

The San Francisco session did set a new record in the number of wives and other women guests registered—701, which is further proof of the attraction which sunny

California and cool San Francisco had for the distaff side of the convention, and also undoubtedly reflects the marked growth of, and interest in, the Women's Auxiliary.



Dr. L. M. Hurt, the new president.

ATTENDANCE

The official registration of 2,111 was distributed as follows:

Veterina																											
Veterin	ar	18	n	s-		E	Ю	n	H	m	e	n	a	D	e	n	В		0. 1							9	5
Women	(74	1)	1	n.	D:	d		C	h	il	ld	lr	re	1	1	-	8	5)		0	0	0	0	786
Exhibit	or	8	(oi	tì	16	r		t	h	a	n	1	V	e	t	e	ri	n	2	r	i	a	n	8)	98
Guests																											60
Student																											26

Of the total, the state of California alone accounted for nearly half (953) of the reg-

istrants, of whom 529 were veterinarians.

Forty-seven states-only Maine had no delegate—the District of Columbia, Alaska, the Canal Zone, Hawaii, and Puerto Rico accounted for the United States family of delegations, while five Canadian provinces with 32 representatives, and the Republic of Mexico with one, completed the North American contingent.

In all, 18 countries were represented by one or more distinguished guests, making the San Francisco session one of the most international in character ever held by the

In the House of Representatives, 52 constituent associations out of 59 answered the roll call.

The geographical distribution of the registration figures follows:

Alabama	14-	Georgia	13
Arizona	25	Idaho	25
Arkansas	2	Illinois	95
California	953	Indiana	55
Colorado	31	Iowa	42
Connecticut	3	Kansas	40
Delaware	3	Kentucky	5
District of		Louisiana	10
Columbia	19	Maine	- 0
Florida	6	Maryland	10

Massachusetts .	18	West Virginia 4
Michigan	26	Wisconsin 9
Minnesota	24	Wyoming 13
Mississippi	10	g 14-4-1 20-10
Missouri	46	Subtotal2,042
Montana	22	Canada 32
Nebraska	22	Cuba 16
Nevada	20	Alaska 1
New Hampshire	5	Bahamas 2
New Jersey	11	Canal Zone 1
New Mexico	8	England 1
New York	57	Hawaii 5
North Carolina.	5	India 1
North Dakota	11	Italy 1
Ohio	53	Latvia 1
Oklahoma	17	Mexico 1
Oregon	94	Northern
Pennsylvania	20	Rhodesia 1
Rhode Island	1	Peru 1
South Carolina.	2	Puerto Rico 1
South Dakota	6	Scotland 1
Tennessee	12	Switzerland 1
Texas	49	Turkey 2
Utah	27	
Vermont	1	Subtotal 69
Virginia	9	
Washington	89	Total2,111

The Convention Tour

The touring members and their guests, bound for San Francisco, reported in Chicago according to schedule, and on August



The opening session in the Gold Ballroom, Palace Hotel, at the eighty-fifth annual meeting in San

9 boarded the Rock Island train at 6:30 p. m. on the first leg of the journey.

As reported in earlier issues of the JOURNAL, the tour traveled as a unit to San Francisco with stopovers at Carlsbad Caverns, Juarez, Mission Inn at Riverside, Calif., Huntington Library, Pasadena, an evening at Earl Carroll's, and a day of sightseeing in Los Angeles and Hollywood.

After the Convention, the tour was divided: one section going to Honolulu, the other to Portland and Seattle. From this point eastward, three groups were formed for the return trip: one came via Glacier National Park, Lake McDonald, Going-to-the-Sun Highway, and Two Medicine Lake; another came via Yellowstone Park—Mammoth Hot Springs, Old Faithful, Mud Volcano, and the Grand Canyon of the Yellowstone—and through Sylvan Pass, near Shoshone Dam, and a stop at Cody Inn; the third group via Vancouver, Kicking Horse Canyon, Lake Louise, Banff, Calgary, Medicine Hat, and Moosejaw.

The trip from Chicago and return through the Canadian Rockies was more than 6,000 miles long, and the other routes were only slightly shorter. A few of the sidelights and unscheduled extras are mentioned in the AVMA REPORT in the advertising section (pp. 21, 22). The post-convention AVMA meeting in Hawaii is reviewed in some detail in the News section.

The touring members were assigned space in Pullman cars, and they retained this space throughout the tour. Each car was really one big, happy family, and the several cars were always together so that it was easy to visit while going to and from the diner-and also easy to sit down for a longer chat. Everybody seemed to have an enjoyable trip, to derive much pleasure from getting better acquainted with other AVMA members, and many look forward to future convention tours. The comment has been so favorable that Happiness Tours is already planning to submit to the Executive Board a proposal for a tour in 1949.

The President-Elect

Dr. C. P. Zepp, Sr., New York City, the president-elect, was born March 10, 1892, on a farm near Gettysburg, Pa. He attended the public schools and then Shippensberg State Teachers College, and taught school for one year following gradu-

ation. For two years thereafter, he was physical instructor and athletic coach at Troy Academy, Troy, N. Y. He received his veterinary degree from New York State Veterinary College at Cornell University in 1919. While in college he was captain of the wrestling team and held the 175-lb.



Dr. C. P. Zepp, Sr., the president-elect.

championship; he was also a member of the football squad; was elected to the honorary society, Sphinx Head, and the veterinary honorary society of Phi Zeta, and Phi Kappa Sigma and Omega Tau Sigma fraternities.

During World War I, Dr. Zepp served as an officer of the 72nd Field Artillery and attended the School of Fire at Fort Sill, Okla. He is now a member of the Society of American Wars; also the Lion's Host Club of New York City.

He has had a busy professional career, having been in practice in New York City since graduation. He is an active member of the New York City Veterinary Medical Association and the New York State Veterinary Medical Society, and served on the

executive board of the latter; an active member and former executive board member of the American Animal Hospital Association of which he was president in 1944-1946: also a member of the United States Livestock Sanitary Association.

Dr. Zepp joined the AVMA in 1927; in 1946, he was appointed to represent District IX (the New England States and New York) on the Executive Board for the unexpired term of Dr. W. A. Hagan when the latter became president-elect. The following year, he was elected to a five-year term on the Board which would have expired in 1952.

He married M. Lillian Gibboney in 1920; they have two children, a son, C. P. Zepp, Jr., a graduate of New York State Veterinary College, class of 1943, and a daughter. Elaine G. Zepp.

The Opening Session

Monday Afternoon, Aug. 16, 1948

The opening session of the Eighty-fifth Annual Meeting of the American Veterinary Medical Association, held at the Palace Hotel, San

cal Association, held at the Palace Hotel, San Francisco, Callif., August 16-19, 1948, convened at 1:45 p. m., President W. A., Hagan presiding. PRESIDENT HAGAN: The meeting will be in order. I now declare the eighty-fifth annual meeting of the American Veterinary Medical Association to be in session.

Following the invocation, if you will please the project of the property of the property of the project of

remain standing, we will sing the National Anthem led by Mrs. C. B. Miller.



Mrs. Chauncey B. Miller, San Francisco, co-chairman, Women's Activities, was the vocalist at the opening session.

The invocation will be pronounced by the Rev. Aloysius Sullivan, St. Cecilia's Church, San Francisco. Father Sullivan!

REV. ALOYSIUS SULLIVAN: In the name of the Father and of the Son and of the Holy Ghost. Amen.

O God, the Father of all creation, look down kindly upon this assembly and graciously bestow Thy blessing upon the persons here gathered and the deliberations which are to follow.

In Thy divine wisdom, Thou has established a wonderful order in the work of Thy hands, After the creation of the dry land and the seas,



Dr. C. U. Duckworth, Assistant Administrator, California Department of Agriculture, delivered one of the addresses of welcome. Mayor Elmer E. Robinson of San Francisco also welcomed the delegates.

Thou madest the beasts of the earth, according to their kind, and the cattle and everything that creepeth upon the earth, and, finally, fashioned man after Thine own image and gave him dominion over all living creatures. So has it been; so it is today. Man still, in Thy providence, has dominion over all living creatures, and in Thy divine plan these creatures are made subject to man. They are given to us by Thee for our use, for our benefit, for our life itself.

And, thus, in all propriety, we humbly ask Thy guidance that we may properly and ex-pertly minister to them according to Thy Holy Will. Thou hast given them to us to serve us. May we use them and treat them and serve them in accordance with Thy plan of creation, to the end that all Thy creatures may show forth the glory of God, through Jesus Christ, our Lord. Amen.

(Singing of the National Anthem, led by Mrs.

PRESIDENT HAGAN: Those of us who have een enjoying the hospitality of California and San Francisco are very happy to have the mayor of this great city here on the platform today to present greetings and to welcome us to the city of San Francisco.

It now gives me a great deal of pleasure to present The Honorable Elmer E. Robinson,

p g

Mayor of the City of San Francisco, who will now address you. Mayor Robinson! (Applause.)

ADDRESSES OF WELCOME

THE HON. ELMER E. ROBINSON: Mr. President, Reverend Father, Ladies and Gentlemen: The American Veterinary Medical Association is indeed welcome to San Francisco. I count some of your local members among my very good friends, and from them I know the high level of character and ability which this organization represents.

San Francisco is proud to have been chosen as your convention city. The rôle of the veter-inarian in the life of each American community is one of increasing importance. Your contributions to the economic life of each community

butions to the economic life of each community and, thus, to the nation, are widely known. The improvement in the breeds, the useful-ness, the productivity of our farm animals, so basic a factor in America's economy, are a splendid tribute to your profession. The high degree of skill, your exacting standards of professional competence, and the

steady and loyal effort which you bring to your profession have won for you the confidence of the American people.

If American animal husbandry is becoming a greater and greater factor in the welfare of our economy and in the lives of our people, the American veterinarian is to be thanked for

For many of you, this is your first visit to an Francisco, and I would be remiss if I failed to tell you something about this extraordinary city of ours. I hope that during your convention you will have an opportunity travel throughout San Francisco and see so many visitors who have come here have always kept a warm spot in their hearts for our city.

You can see for yourselves, of course, that the setting of San Francisco is most unusual. For here you have contrasts that never grow stale. There are points in our city where you may have a delightful view of the ocean, mountains, and a sheltered bay.

You will find that many sections of the city have a unique charm about them because they have kept something of the flavor and the traditions of the old world from which our people have come. eople have come.

You will, I think, appreciate the significance of this, that all our people are proud of the fact that in various sections of the city we have the picturesque traditions and languages of other nations.

other nations.

If our fine Chinese people are having a celebration, all citizens join in the spirit of frolic with them. If there is to be a celebration by our Italian people, again all San Franciscans join heartlly in that celebration. And so it goes with each of the groups which comprise San Francisco. The Irish, the Spanish, the French, the German, are all a welcome and essential part of the life of San Francisco, and each makes its contribution to the spirit of tolerance and friendliness so characteristic of San Francisco. Francisco.

We believe that this is the truly American way of leading a community life. You might define it as a very real respect on the part of the community as a whole for the fine traditions of each of its member groups.

San Francisco is a city which invites those with an eye for the picturesque. You will find here some of the flavor of the old world, and this, to us, is not a pose or something artificial;

It is a part of our life.

If we are known as a friendly and cosmopolitan city, it is because here the children of many nations have spent their childhood together, attended school together, and have come

to understand, respect, and like each other. To an unusual degree, we know in this city what literal truth there is in the statement that America is the melting pot of the world.

We take pride in the achievements of our cople. We know that in every community enpeople. terprise which tries to make life better for all the people, every nation and every race is represented among those actively forwarding such a project.



Dr. Joseph M. Arburue, San Francisco, general chairman of the local committee.

Our city, then, has many contrasts, but you will find that all of them are blended into a harmonious whole. You will find that in San Francisco no one remains a stranger, and no

one feels that he is an outsider.
We are proud of the fact that this typically American community has a high regard for all, without distinction of race, color, or creed. You will observe this on your stay Francisco. I hope that your memory of our city will be a reminder of the fact that people of every race, creed, and color can live together in peace and harmony to make a happy, wholesome, and progressive community.

Your leisure time in San Francisco will take you from the Old Mission established by the gentle padrés in 1776 to the more recent souvenirs of the 48'ers.

You may not realize that San Francisco only forty-two years ago suffered a devastating fire. Our city was prostrated. But, with the surging vigor and vitality that have always characterized the people of San Francisco, our people rolled up their sleeves and got to work, cleaning away the debris and building a finer and more beautiful city on the ruins of the old. That is the spirit of San Francisco, and those are the people for whom I speak now in ex-tending to you a most cordial welcome and assuring you again that we are proud to have this convention of the American Veterinary

To depart from my script for a moment, want to show you how really sincere we all are in our greetings to you. One of the very active men in our local Civil Service Commission preceded me here today, and preceded

Medical Association in San Francisco.

most of you, and you will find a scope, a Civil Service scope, indicating that San Francisco needs a veterinarian. We are trying to attract you to come here and stay permanently. We are willing to give you a job. (Laughter.) That is how much we really welcome you to San Francisco.

Out of this great audience, I hope one or more of you will be interested in this examination, because we do need a good veterinarian, and I hope I have sufficiently sold you the City of San Francisco that the line will form to right, and the Civil Service Commission will have a great number applying at an early date. (Applause.)

I wish every success to your convention, and I hope that your memories of San Francisco will always be as pleasant as our memories will be of you.

Thank you. (Applause.) PRESIDENT HAGAN: I am sure we all appreciate the remarks of the mayor. Appropriate reply will be made shortly by another.

The Californians never do things by halves, today we are to have two addresses of elcome. They want us to be sure on this welcome.

The next is to be delivered by the assistant administrator of the California Department of Agriculture. I am not going to call him "Honorable" because he belongs to this society and he might not understand it. I don't want to have anything of that sort happen.

(C. U.) Duckworth, Sacramento. Dr. "Undy" Duckworth! (Applause.)

DR. C. U. DUCKWORTH: Mr. Chairman, Guests, Members, Good Friends: I wouldn't know how to begin to address you unless they had given me a little more latitude.

The mayor took up the city of San Francisco, se I guess I have a thousand miles to work on. appreciate that you people have come here to do a job of work. I just hope that, while you are here, you take a little time off—I said "a little"—to play and see what California has to offer by way of attractions, not only as to but industrially and agriculturally. amusement

Incidentally, while we are talking about that, I was very pleased to see the sun come out down here. (Laughter.) My good friend Charley (Dr. C. W.) Bower came out a little ahead of time, you know. He and two or three more of his friends from Kansas were riding around here. We were passing over the Golden Gate Bridge, and Charley said, "Well, is this the Golden Gate Bridge or is this the Bay Bridge?"

I said, "This is the Golden Gate Bridge. If the fog would lift a little bit you could see it. It is way up there, and the ocean is way down there."

He said, "You people had some trouble, I understand about this prison. Where is this Alcatraz Prison?"

"That lays off there about a mile or mile and a half. If the fog would lift, you could see that."

"Where is the Bay Bridge," he said.

that's beyond there. That, too, you can't see for the fog."
He said, "Duckworth,

why don't you come out to Kansas? We haven't anything in Kansas to see but, if we had you could sure as hell see it." (Laughter.)

Well, the sun is out. You will be able to see a lot of fine things. I would suggest, if you can, to take time to swing north of here and see our Redwood forests. I think it would be see our reawood forests. I think it would be fine if you would go down through the San Joaquin Valley. You will see fruit and grape production, dairy production, beef production that will really astound you. If you go on farther, you will see some commodities that are grown only in California and in the old world.

California is famous for its boasting. you know, you gentlemen from Pennsylvania are going to say to somebody in California, "You should see the Pennsylvania oilfields," And the Californian is going to say, "Did you ever see Signal Hill or Santa Fe Springs or Kettleman Hills?"

And someone from the pine forests back there is going to say, "You should see our forests."
And a Californian is going to say, "Take a look at the Redwoods."

Some fellow with a burnoose and long robe is going to say, "In Arabia, we raise dates." We say, "Don't waste your time in Arabia. Go down to the Coachella Valley, and we will show you what date gardens are." That isn't surprising when you realize that this state is 1,000 miles long.

If a man from northern Illinois were to tell a man from southern Louisiana of conditions there, and the man from Louisiana, in the there, and south, would tell him what conditions were there, nobody would think anything of it. time, when you have an old map of the United States, cut California out of it and superimpose it over Illinois and you will find that it reaches from Lake Michigan to the Gulf of Mexico. We produce agricultural commodities from 10,000 feet above sea level to 250 feet below, with just about all kinds of soil. We have areas in which it rains cats and

dogs, literally, and we have areas in which it practically never rains. All of these things For the natural resources we have were here. the good Lord to thank. But, as I look around at you people, I see faces here from all over the United States, men that I have known, whose work I have followed and admired in many parts of the country.

We owe the progress that has been made in California not principally to people that were here originally but to you people from all over the country, who have come here with in-itiative and have taken advantage of the great natural resources we have, to build one of our great agricultural states and now, one of our great industrial states.

This is not merely a state of Californians. I would venture to say that, while this room is filled with people from all over the United States and from some of our foreign neighbors, If you would go out on Market Street and butto hole people, you would find just as cosmo-politan a population walking up and down the street, conducting their business in San Fran-cisco, as you would find right in this room, and that applies to the balance of California.

While you are here, enjoy yourself. Call on our fellow practitioner or call on our official departments to be 8f assistance to you in making your stay enjoyable. We have had an increase in our population of some 40 per cent since 1940. We don't know how we are going to handle them all. We have invited people here for many years, and this would be a bad time to say, "Stay home, we don't want you."

8 0

11 p

a

A

00

M 01

We want to help you enjoy yourselves. I bid this Association and its friends welcome. (Ap-

PRESIDENT HAGAN: I think, perhaps, we should have somebody from Texas or some other area to respond to these addresses, but Mayor Robinson.

The official response will be given on behalf of the Association by one of our Canadian colleagues, the Principal of the Ontario Veterinary College, Dr. A. L. MacNabb. Dr. MacNabb! (Applause.)

RESPONSE

DR. A. L. MacNABB: Honorable Mayor Robinson, Friends of the city of San Francisco, Dr. Duckworth, good people of California: I won-dered why I, as a Canadian, a member of the American Veterinary Medical Association, was chosen to perform this duty. Suddenly, now, the fact has come to me that probably because I am innocent and would not go into any discussion of the merit of each state of the Union. (Laughter.)

The second point is, the Mayor has already invited us all to come and live here. So I, being the first veterinarian on the program, probably will be the first applicant. (Laughter.)

I consider it a signal honor, as a member of the American Veterinary Medical Association, to have this opportunity of expressing the thanks and appreciation of the members of our Association to the people of San Francisco and the good people of California.

We, the members of the American Veterinary

Wedical Association, are deeply appreciative of the scientific contribution made by the scien-tists and field workers in the state of Califor-nia. One has only to think of the great contributions which have been made in those diseases or conditions of animals and birds transmissible to man. Of special note are the con-tributions made to the condition of leptospi-rosis, of sylvatic plague, psittacosis, equine encephalomyelitis, and so on.

Then, when we turn to what was previously

considered the purely veterinary field, now the public health field as well as veterinary field, the great contributions made in bovine brucellosis and the subtle and intricate facts which have been brought to light relative to breeding deficiencies of animals.

The scientific field has been enriched greatly, in the libraries of our country by contributions made by the scientists of California. Those of us who live in the more northern climes are deeply appreciative to California for the gift of citrus fruits.

As far as veterinary service in California, we also mention the medical fraternity the great contributions made by those resident in the State of California, having in mind particularly the contributions on the condition of poliomyelitis and human infections with equine encephalomyelitis. The advances made in vet-erinary medicine in the future will largely depend on the sympathetic support given veterinary medicine by the community, and too frequently has the veterinary profession been beclouded by other organizations, or allied sciences junior to it.

The cost of education of veterinary medicine today has markedly increased. California is to be commended for the establishment of a School of Veterinary Medicine. The progress which has been made in graduate schools of study and the imperative need of counseling of graduate students has always added to the

I would like at this time to say that the line of demarcation between preventive and curative medicine has disappeared and that the integration of professional work must become more intimate, that the contributions made by veterinary medicine in years past has aided to improve the health of the community, having in mind that there are thirty-six conditions of animals transmissible to man.

May I, therefore, in closing say that the American Veterinary Medical Association has a true perspective, inasmuch as there are no geographical boundaries between health and

education.

We, the members of the American Veterinary Medical Association, an institution consisting of possibly 9,600 members, with membership

throughout the different states of the Union, Canada, Mexico, and other far-flung lands unite in extending our appreciation for the warm welcome by Dr. Duckworth, the Hon. Mayor Robinson, and we go forth hand in hand to improve the lot of the people resident in



Dr. A. L. MacNabb, Principal, Ontario Veterinary College, and Executive Board member (District 1), responded to the addresses of welcome.

our communities, who follow a democratic and free way of life.

May I, in closing, as a Canadian, bring warmest greetings, from all members of the American Veterinary Medical Association and from veterinarians resident in Canada, to the people of San Francisco and California.

Thank you. (Applause.)
PRESIDENT HAGAN: Thank you, Dr. Mac-Nahh

Most of us men must admit that whatever measure of success we attain in life is due, in part at least, to our helpmates. The AMVA has a Women's Auxiliary made up of the members who are helping the central association to attain its goals.

I am very happy to have next on the program the president of the Women's Auxiliary of the American Veterinary Medical Association, Mrs. Ashe Lockhart of Kansas City, who will now present greetings from her Association.

I am glad to welcome you, Mrs. Lockhart, and present you to the audience. (Applause.)

GREETINGS FROM WOMEN'S AUXILIARY

MRS. ASHE LOCKHART: Dr. Hagan, Ladies and Gentlemen: It is my very pleasant duty today to bring you the greetings and good wishes of the Women's Auxiliary to the American Veterinary Medical Association.

We bring our greetings not only to the ladies present but most especially to the men who are responsible for our being here at this time.

As you all know, and have known for many years, the project of the Women's Auxiliary is

that of a loan fund to senior veterinary students to tide them over a critical period in their last year of schooling.

Of course, now, with the G. I. Bill of Rights helping these boys through school, we have had very few calls for loans, and the future will tell whether that need will arise again. But because of that limiting of the loans, the



Mrs. Ashe Lockhart, Women's Auxiliary president, extended greetings at the opening session.

Board of the Auxiliary is recommending the awarding of \$25 annually to a senior student in each of the accredited veterinary colleges; this award to be given not on the basis of scholarship but, rather, for original work, and that will be determined by the dean of the college in consultation with the president of

the Women's Auxiliary.

Just before I left home I received the catalogue of the Iowa State College, and they are announcing that award, and I am sure the

other colleges will do the same shortly.

In addition to these two projects, the women of the Auxiliary have another, and that is advertising the veterinary profession, not the work you do but advertising you as individuals for what you are, men whose years of educa-tion put you in the highest ranks of the pro-fessional men. That is something that many outside the profession do not know. It is

outside the profession do not know. It is something the wives are immensely proud of. If we brag on you for that, it is not only on you as individuals but because you are a part of the great veterinary profession.

What do women do to help? First, we marry you. (Laughter.) That is our starting point. Then we go on, and, as the years go by, we join our State Auxiliary, perhaps a Regional Auxiliary, and the Auxiliary of the American Veterinary Medical Association.

Women individually accomplish a great deal; women united accomplish a great deal more,

women united accomplish a great deal more, and this proves the foresight of the women who marry you and then unite in groups to do something for you. We want to feel that we have a part in the education of the students who will become veterinarians. We want to feel that we have a small part in providing libraries at the colleges for the students. We want to feel, perhaps, we have tided a student over a critical period in his senior year. We want to feel that we have provided an incentive in getting a student to do some original work and that this award though small, may prove that little point.

I would like to say to all the ladies present. we hope very earnestly that you will take part in our meetings.

This afternoon is the second annual meeting of the House of Representatives. It will be held in the French Room on the second floor. All of you who are interested and have the time are most welcome. Please, on Wednesday, count on having breakfast with us at the Fairmont Hotel and staying afterwards for our annual meeting. You will find it interesting and informative. We need your cooperation.

To the gentlemen I would like to say a most gracious thanks for including us in your program today.

Thank you. (Applause.)
PRESIDENT HAGAN: I am sure I speak for the audience when I thank Mrs. Lockhart for

the greetings.

Now we are to be favored with a solo by Mrs. C. B. Miller. (Vocal solo by Mrs. C. B. Miller.) (Applause.) PRESIDENT HAGAN: Thank you very much, Mrs. Miller, for the beautiful selection,

MESSAGES OF GREETING

At this time I would like to read some telegrams and other messages that have been re-ceived. One is a telegram from Highland Park, Ill., addressed to:

American Veterinary Medical Association Palace Hotel, San Francisco Greetings and best wishes. Dr. and Mrs. N. S. Mayo.

Another is a cablegram from São Paulo, Brazil, addressed to Dr. Hardenbergh as the ex-ecutive secretary of the AVMA, and it states that the Veterinary Medical Society of São Paulo wishes the best success for the eightyfifth meeting of the American Veterinary Medical Association.

I have a telegram addressed to me from George U. Hind, acting president of the San Francisco SPCA:

on behalf of the San Francisco Society for the Prevention of Cruelty to Animals, I extend to you and your fellow members of the veterinary profession a most cordial welcome to San Francisco and a warm invitation to visit our Society during your stay here. You have our best wishes for the success of the AVMA Convention and enjoyment of your stay in San Francisco. Our Society has urged the members of its veterinary staff to participate as fully as possible in what we know will be a most worth-while convention. worth-while convention.

That is signed, as I stated a moment ago, by George U. Hind, acting president of the San Francisco SPCA.

I have several greetings brought by our col-league, Dr. Malaga from Peru. One of them is as follows:

The deans of the veterinary schools of Chile, Venezuela, and Peru, and veterinary representatives from Argentina, Uruguay, and Ecuador voted on a resolution urging that the AVMA take serious steps to promote an early meeting of the First Pan-American Veterinary Congress. At the meeting commemorating the fiftleth anniversary of veterinary education in Santiago, Chile, these men felt that the Pan-American Congress is necessary to bring together the veterinarians of the United States and Latin America to discuss mutual problems of animal sanitation and public health for the benefit of their respective countries and the good of the veterinary profession in general.

The assembly wishes the AVMA a happy, congenial and successful eighty-fifth meeting at San Francisco.

ing at San Francisco.

Another one:

The Peruvian Veterinary Medical Association sends salutations to the AVMA and wishes it a most successful convention at its eight-fifth meeting. Greetings are extended to President Wm. A. Hagan and congratulations are offered to Dr. L. M. Hurt for a happy tenure of office.

The Peruvian Veterinary Medical Association wishes to make known its desire for an early gathering of the First Pan-American Veterinary Congress. It feels that this is necessary for the good of the veterinary profession of all the Americas.

The third communication is really addressed to the Ladies' Auxiliary. I will read it here since I believe it will be of general interest, and then I will turn it over to Mrs. Lockhart:

nd then I will turn it over to Mrs. Lockhar To the Ladies' Auxiliary of the AVMA: The wives of the Peruvian veterinarians send their warm greetings for a memorable session at San Francisco. They are anxious to inform the ladies of the Auxiliary that they are organizing a Peruvian association which will try to achieve the purposes that their American sisters have so nobly formulated.

PRESIDENT'S ADDRESS

At this stage the Constitution requires that the president present an address. Therefore, we will launch into it.

(President Hagan read his address.) (See JOURNAI, Sept., 1948:207.) (App'ause.) PRESIDENT HAGAN: We will now hear

from Dr. Arburua who has some announcements on behalf of the Committee on Arto make rangements.

ongements. Dr. Arburua. DR. J. M. ARBURUA: Mr. President. tinguished Guests, Ladies and Gentlemen: First of all, not to be outdone by the invitations that have been so generously handed out by the Honorable Mayor and by the State of California, represented by Dr. Duckworth, your Committee on Local Arrangements would like to express their happiness in having you with us, and assure you that they will do everything they possibly can to make your stay as happy as pleasant as it possibly can be.

(Dr. Arburua made announcements,) plause.)

PRESIDENT HAGAN: A pleasant and interesting part of the program each year is the presentation of certain awards. The first one presentation of certain awards. The first one that will be presented today is the Humane Act Award. This is an award that is made each year by a committee of which our treasurer, Dr. W. A. Young, is chairman. Therefore, I am going to ask Dr. Young to come to the microphone to make this presentation. (Applause.)

1948 HUMANE ACT AWARD

DR. WESLEY A. YOUNG: President Hagan. Distinguished Guests, Ladies and Gentlemen: May I say, on behalf of the committee consisting of your own Dr. Michael here in Cali-Garbutt of New York, and myself, fornia, Dr. that the job is not quite as exciting as last year and some previous years when the re-cipient of the award was present.

This is the fifth year of the Humane Act ward. It is awarded each year to a boy or Award. girl, within the membership area of the AVMA, who has been kind in an extraordinary way to animals,-the rescue of an animal, some literary work in the humane field, or personal efforts or work.

This year we had 37 nominees who were given This year we have a final consideration. Their activities the consideration of a Junior SPCA in one of the constern states; a Canadian boy performed from the bay, an excellent rescue of an animal from the bay, and several other rescues or combination of rescue and care; one boy gave a part of his own

food to a rescued mother dog and a litter of puppies.

After due deliberation, the committee decided on a boy from Mentor, Ohio. He is Richard Swank, 15-year-old lad who lives with his mother and junior members of the family, but without a father to provide for them.



President W. A. Hagan delivering his address at the eighty-fifth annual meeting in San Francisco.

The youngster has substantially made his The youngster has substantially made his own way by delivering newspapers, running errands, and on one occasion helped to dig a ditch 400 feet long, in which instance the money earned provided necessities for the animal which he rescued.

The award is given to Richard Swank because of his rescue of a puppy. It was cold and Richard had retired. Hearing the cries of the runny hearses dressed took a fleehight.

the puppy, he arose, dressed, took a flashlight, and began searching; he found the pup along the railroad track, ill and abandoned by some-one who evidently thought that was the best

way to get rid of it.

Richard took it home and nursed it. Interestingly enough, he took this puppy to the local veterinarian and, together, they treated and nursed this puppy back to health.

Being a good citizen, he bought a license for his dog, realizing that a license is not a means of extracting tax money from people but is the dog's personal identification card, and is valuable if the dog is lost.

It was necessary for this female dog to be spayed in order that Richard be permitted to keep her in his home.

Again the boy went through trials and trib-

ulations to raise money to help defray the expenses of the operation, and, again, he went to his veterinarian. With the help of that veterinarian, the necessary surgery was performed.

Today, this boy has a very fine dog, considered one of the smartest dogs in that part of Ohio, and maybe the whole state!

I wish to refer to a comment made by one member of the committee. In making this selection from the 37, he pointed out that here was a boy in meager circumstances and sur-roundings, who performed a kind deed to an animal and he persevered, he continued until he had the finished product-a fine four-footed friend in the shape of this dog.

So at this time, ladies and gentlemen, I be-stow upon Richard Swank, in absentia, this Certificate of Award and a \$100 face-value gov-ernment "E" bond. This framed award says:

Citation

Humane Act Award of the American Veterinary Medical Association, Kindness brings happiness to the one who gives it. This is given to Richard Swank of Mentor, Ohio, who rescued an abandoned and sick puppy the night of January 5, 1947, nursed it back to health; earned his own money to pay for a surgical operation on it—all in the face of many discouragements, inconveniences, and shortages of money.

Presented at the Eighty-fifth Annual Meeting of the American Veterinary Medical Association, San Francisco, California, August 16-19, 1948.

sociation, 1 16-19, 1948.



Richard Swank, Mentor, Ohio, winner of the 1948 Humane Act Award, and his dog which he rescued when a puppy from a railroad track.

It is signed by your president and the execu-ve secretary. Thank you very much. (Applause.)

PRESIDENT HAGAN: Thank you, Dr. Young. The By-Laws of the Association provide that the president shall serve as chairman ex officio of the Committee on Awards. Therefore, I have the honor and pleasure today of dealing with the next two awards. The first one is the with the next two awards. The first one is the Twelfth International Veterinary Congress prize.

TWELFTH INTERNATIONAL VETERINARY CONGRESS PRIZE

PRESIDENT HAGAN: This prize was created, again, from funds that were collected from veterinarians in this country at the time of the Twelfth International Veterinary Congress and were not utilized for that purpose.

The residue then was set up as a fund, the income of which was to be used as a prize to be awarded annually to members of the Association who were deemed to have rendered dis-tinguished service to the veterinary profession of this continent.



Dr. A. E. Cameron, Ottawa, Can., former Veterinary Director General of Canada, now retired, was awarded the 12th International Veterinary Congress Prize.

It is my pleasure to inform you that the committee elected this year, as the recipient of this prize, Dr. A. E. Cameron of Canada. Dr. Cameron, will you come to the platform?

(Applause.)

Citation

Lieut.-Col. Alne Edward Cameron, M.C., V.D., V.S. is well known to practically every veterinarian in Canada and to many in the United States and elsewhere. Colonel Cameron is a distinguished soldier having served with honor in three years. His first service was in the Boer War in South Africa in 1899-1900. In World War I, he was Veterinary Officer of the Sixth Canadian Infantry Brigade in France, Belgium, and Germany. In World War II, he was commanding officer of the War Disease Control Station on Grosse Isle where the Joint American-Canadian Army Research Commission conducted its work on rinderpest.

Dr. Cameron obtained his veterinary train-

dian Army Research Commission conducted its work on rinderpest.

Dr. Cameron obtained his veterinary training at the Ontario Veterinary College, where he graduated in 1908. It is said that he carried off with him most of the scholastic prizes that his school had to offer. After a short period in private practice, he joined the Health of Animals Branch of the Dominion Department of Agriculture and served successively in the Meat Inspection, Field Work, and Pathological Divisions. In 1925, he was appointed chief veterinary inspector and subsequently was appointed Veterinary inspector and subsequently was appointed Veterinary inspector and subsequently was appointed veterinary inspector and subsequently of Canada. He retired from active service in 1943.

Dr. Cameron has done much to merit the admiration and respect of his professional colleagues. His rugged Scottish honesty, his geniality, his capacity for work, his unfailing wisdom, his zeal to improve the profession of his choice, are the qualities that commended him to the Committee on Awards.

I am greatly honored, Dr. Cameron, to have the privilege to present to you, on behalf of the American Veterinary Medical Association, the Twelfth International Veterinary Congress Award for 1948.

PRESIDENT HAGAN: I believe this award

PRESIDENT HAGAN: I believe this award consists of a certificate and a check-I don't see the check but it will come to you in due

DR. A. E. CAN E. CAMERON: Mr. President, Ladies DR. A. E. CAMERON: Mr. President, Ladies and Gentlemen: This is a very happy moment in my life. First of all, I want to express my gratitude to the committee responsible for recommending me for this award and to say that it is a happy thing to attain such an honor during the closing period of one's professional

Of course, I am entirely conscious of the fact that men in senior positions are deeply in-debted to their assistants, and much of the honor is due to the fine corps of veterinarians with whom I have been associated. They will. I think, be pleased that this honor comes to Canada and that I shall have the honor of carrying the award on their behalf.
Personally, I deem it a great ev

Personally, I deem it a great event to be associated with the outstanding veterinarians who have obtained this award in the past. It seems to be a climax of the many kindnesses I have received from the American Veterinary Medical Association, and I am deeply grateful. (Applause.)

PRESENTATION OF BORDEN AWARD AND MEDAL

PRESIDENT HAGAN: The next award is known as the Borden Award. This is made, through the generosity of the Borden Company Foundation, annually to a member of this Association, and similar awards are made to members of a number of other organizations, all of which are interested in some aspect of dairy cattle or milk production, which, of course, is the field in which the Borden Company is pri-

The Committee on the Borden Award voted to recommend this year Dr. Arthur F. Schalk of Columbus, Ohio. I will ask Dr. Schalk if he will come to the platform. (Applause.)

Citation

Dr. Arthur F. Schalk was reared on a dairy farm in Butler County, Ohio. At the age of 17, he began his teaching career in a district grade school. After eight years of this, he entered Ohio State University from which he was graduated with a D.V.M. degree in 1905. Immediately following graduation he entered the service of the U. S. Bureau of Animal Industry where he served for about five years, principally in the Meat Inspection Division.

In 1910, Dr. Schalk was appointed assistant professor in the School of Veterinary Med-icine, and assistant veterinarian in the ex-periment station of North Dakota State Colicine, and assistant veterinarian in the experiment station of North Dakota State College. Here he remained for twenty years of active and productive work. In 1918, he became chief veterinarian of the staff upon the resignation of Dr. L. Van Es, his chief. Besides teaching, routine diagnostic work, and administrative duties, Dr. Schaik found time to carry on an active research program in collaboration with his colleagues. Not all of this will be mentioned here, but those familiar with veterinary literature will recall his studies on swamp fever of horses, avian tuberculosis, hog cholera, avian infectious bronchitis, and sweet clover poisoning of cattle. His work on the physiology of ruminant digestion has clarified many features of a complicated process that long had been obscure. It is difficult to estimate the value to mankind of this process which enables the ruminating animals to convert the grasses of the temperate zones of the world into human food. This work is of far reaching significance since his techniques have paved the way for many other studies of this process.

In 1930. Dr. Schalk resigned at North Da-

cess.
In 1930, Dr. Schalk resigned at North Da-kota to accept the newly created position of professor of Preventive Medicine in the Col-iege of Veterinary Medicine of his alma mater, Ohio State University. Here he has

rendered distinguished service as a teacher

rendered distinguished service as a teacher and research worker.

Dr. Schalk, I have great pleasure in congratulating you on a career of great usefulness. Your geniality has endeared you to a host of friends, and your genius has established a reputation for you that long will live in the annals of your chosen profession.

The Committee on Awards of this Association has voted to recommend you as the recipient of the Borden Award for 1948 on the basis of your work with dairy cattle—namely, your work on the sweet clover disease and especially your work on ruminant digestion.



Dr. A. F. Schalk, College of Veterinary Medicine, Ohio State University, received the 1948 Borden Award medal and \$1,000 prize from Mr. W. A. Wentworth of the Borden Foundation for "outstanding research contributing to the control of dairy cattle diseases."

PRESIDENT HAGAN: I wish to present to the audience Mr. W. A. Wentworth, secretary of the Borden Company Foundation, who will, on behalf of the company, make the presenta-tion. Mr. Wentworth! (Applause.) MR. W. A. WENTWORTH: President Hagan,

Dr. Schalk, Ladies and Gentlemen, I just want to say this to you, Dr. Schalk. This, like the junior award for the humane act, is the fifth of these awards which the American Veterinary Medical Association has made for research which contributes to the control of diseases in dairy cattle.

The first of these awards was made in 1944 to Dr. Huddleson; the second in 1945 to Dr. Boyd; the third in 1946 to Dr. Cotton, and last

year to Dr. Traum of California.
You join the list of distinguished gentlemen who have received this award at the hands of your Association.

After listening to the mayor of San Fran-After instelling to the major of san Francisco, and Dr. Duckworth, it seems to me that you also may have a feeling that this is just a little bit bigger, and perhaps a little bit better than the previous awards. That is solely because California undertakes to do everything better. (Laughter.) In this connection, our part is this: We specified that the gold in this gold medal should come from California. (Laughter.) I might also say that some of the income, before taxes, which created the fund from which the \$1,000 comes, was also earned

in California.

I want to qualify that a little bit, that it came before the organization of what I believe here in California they call Mammas, Inc.

Is that the name, Dr. Duckworth? (Laughter.) At any rate, it came at a time when there wasn't as much criticism of the prices of dairy products as seems to exist at the present time. Dr. Schalk, this gold medal says on its reverse side:

Award for outstanding research contributing to the control of dairy cattle disease to ARTHUR F. SCHALK-1948 by direction of the American Veterinary Medical Association.

With it goes this check—we have it with us. (Laughter.) You get it now!

Dr. Schalk, I congratulate you. (Applause.)

Dr. Schalk, I congratulate you. (Applause.) Dr. ARTHUR F. SCHALK: Mr. President, Mr. Wentworth, Ladies and Gentlemen of this Convention: First may I thank you, Mr. Wentworth, and the great Borden Company for this award. I also want to thank you for the Award Foundation which you have established and are maintaining and sponsoring.

I accept this award, this significant and ma-

I accept this award, this significant and material award, but not without deep and sincere feeling of gratitude.

President Hagan, and the remaining members of the Award Committee of the American Veterinary Medical Association, I am profoundly thankful to you for your kind and considerate recognition in this nomination.

Many decades ago, James Lawson, then a young, practically unknown, unsung poet,

Each is given a bag of tools, A shapeless mass, A book of rules; And each must make, Ere life is flown, A stumbling-block Or a stepping-stone.

Since then those passages, those words, have virtually mounted to proverbial proportions and significance.

and signineance. In accordance with the underlying philosophy of those words, may I say that, if one adequately and properly interprets the book of rules and scientifically manipulates the boag of tools sufficiently well, so that one fashions, forms, or molds that shapeless mass into a well-established, substantial, and enduring stepping-stone, he is fortunate. I would like to say he is lucky, but I do not like to use that term "lucky." Beacon lights are not illuminated; straight trails are not blazed across and over difficult terrain; reliable and substantial guide posts are not piloted, and substantial, enduring stepping-stones are not builded by one individual single-handed, alone, very often.

And so it is in this instance. If—and I say and mean "if"—the citations that have been rendered, Mr. Wentworth, and President Hagan, worthily merit and warrant this award, I want here to make public acknowledgment and pronuncement, and endeavor to give due credit to the many fellow coworkers who have col-



Executive Board Chairman W. R. Krill presents service scroll to retiring President W. A. Hagan.

laborated with me in my work. And especially and specifically I want to pay tribute to a wonderful character and a great man who has been a most laudable inspiration in my life, in the earlier formative years of my profession.

It was not only my good fortune but it was by privilege to have been associated and affiliated for many years with Dr. L. Van Es, formerly at North Dakota State College, where I had my beginning in research work, later at the University of Nebraska, and now in highly deserved and well earned retirement.

His profound wisdom and knowledge, his prudent guidance, and his judicious counsel have

meant so very, very much to me.

I have often thought and frequently remarked that it is unfortunate, too bad, too sad, that every young medical man, whether human or veterinary, could not have had the privilege and opportunity that I have had.

expressing my own personal sentiments In and feelings as regards this award, coming at this time in my life, may I say, when course is nearly run, when one's work is almost done, and when one is rapidly approaching, yes, nearing the trail's end of a long professional career and is suddenly and unexpectedly accorded an award of this magnitude and sig-nificance, it certainly gives one a great feeling gratitude and just a whole lot of genuine satisfaction.

This award, this token which symbolizes accomplishment, I want to assure you, Mr. Wentworth, and the Award Committee of the American Veterinary Medical Association that I shall ever prize, deeply treasure most highly among all of my earthly possessions and attainments, be they ever so small.

I want again to express my thanks to one

and all who have been responsible for, and who have contributed to, this grand occasion on

(Applause.)

PRESIDENT HAGAN: The next two presentations, according to the By-Laws of the Association, are to be made by the chairman the Executive Board. I now present Dr. Walter R. Krill who will make these presentations.

GOLD KEY TO INCOMING PRESIDENT

DR. W. R. KRILL: President Hagan, Honored Guests, Members of the American Veterinary Medical Association: At this time I would like to ask President-Elect Hurt to step for-

ward, please. (Applause.)
Dr. Hurt, it is with great pleasure and satisfaction that I perform this task, which is part of the duties of my office. A pleasure, because few men have served the profession more fully during their professional career, than you have; your every effort has been to promote the best interests and elevate the standards of the veterinary profession. It is always a pleasure to see the fruit of one's labors and ideals properly recognized. It is also a satisfaction to know that for the coming year the affairs of the American Veterinary Medical Association are in good hands. Your long years of service in the field of public health and livestock disease control both as an active participant and as an administrator have given you a breadth of



Executive Board Chairman W. R. Krill presents gold key to Incoming President L. M. Hurt.

understanding of veterinary problems which has eminently fitted you for this high honor. This Gold Key, is an emblem which signifies

This Gold Key, is an emblem which signifies the importance and responsibilities of the position which you are soon to assume. It also signifies the highest honor which the Association can confer upon one of its members. It places upon your shoulders the responsibilities and obligations of guiding the affairs of this Association for the coming year.

places upon your snoulders the responsibilities and obligations of guiding the affairs of this Association for the coming year.

On behalf of the members of the American Veterinary Medical Association I present you this key; with it go our united support and best wishes for a successful tenure of office. (Applause.)

PRESIDENT - ELECT HURT Mr. Chairman, President Hagan, Friends, Fellow Members: I sincerely hope this key keeps me from a lot of things that I will get into during the next year. I am not acquainted with the tradition of its use, but I have noticed how proudly my predecessors have been in wearing it.

I thank you for the privilege of being here and accepting this as your President, and I hope to measure up in some degree to what you expect of me.

Thank you. (Applause.)

SERVICE SCROLL TO RETIRING PRESIDENT

Dean Hagan, it is not without a tinge of regret that I present to you this service scroll in recognition of your valuable service during your tenure of office as President of this Association Only we who have been closely associated with your activities during the past year fully appreciate the inspirational leadership and the enthusiasm with which you car-ried the message of the American Veterinary Medical Association to all corners of our country. Your broad understanding of veterinary problems and sound judgment has been most valuable in promoting the best interests of our Association. It is, therefore, with regret that we near the close of your term as President. However, knowing you as we do, we know this does not mean retirement, but that you will continue to serve the profession and the Association with the same spirit and enthusiasm as in the past. The same motivating force which made you an outstanding leader in veterinary education, which prompted your call serve as a special consultant to the chief of the Federal Bureau of Animal Industry, and your call to serve as veterinary consultant, Division of Public Health and Welfare, United States Group Control Council, in Germany, will bring you many calls and opportunities to serve your profession.

Therefore, on behalf of the members of this association, it is my honor to present to you this scroll in recognition of a year's work well done. With it goes our sincere appreciation and best wishes. May it carry with it a storehouse of pleasant memories and associations of some varies and associations.

of your year's activities. (Applause.)
PRESIDENT HAGAN: Chairman Krill, Ladies and Gentlemen: I think there is very little for me to say here, since I did say at the end of my address that it has been a pleasure for me and a source of great satisfaction to serve this organization, the largest veterinary society of the world, as its president. It is a distinction that I will cherish always, and I appreciate it.

Thank you very much. (Applause.)

NOMINATION AND ELECTION OF OFFICERS

PRESIDENT HAGAN: The next order of husiness is the nomination of officers. Before we proceed to that, I will ask the assistant executive secretary, Dr. Klussendorf, to read the

provisions of the By-Laws relating to this matter so that you will be fully informed about it. Dr. Klussendorf will read it now.

(Dr. Klussendorf read Article III of the By-Laws.)

PRESIDENT HAGAN: Are there any questions about procedure? If not, we will proceed with the nominations.

The first office for which nominations will be made will be that of president-elect. I now call for nominations for this position.

DR. JAMES FARQUHARSON (Colo.): Mr. President, Members of the American Veterinary Medical Association: The American Veterinary Medical Association represents the largest association of veterinarians in the world. Therefore, considerable thought should be given to the leadership of this Association.

I would like to nominate this afternoon a man who has been a most successful practitioner. In his practice he has been an inspiration to many young men. He has helped many solve their problems, and he has contributed his time rather freely throughout the country, giving speeches and demonstrations to the various associations.

He has also shown his organizational ability and leadership in his own community or local organization, his state organization, and his national organization. He has served several terms in the House of Representatives in the national organization. His district has recently elected him to the Executive Board.

He also knows the various angles of veterinary medicine in the field, and he is very cognizant of the value of research. He is also

a member of the Research Council.
All of these things speak for themselves, in that he knows the American Veterinary Medical Association and its problems. He knows the problems in the field, and he knows the problems of education and research.

Therefore, I nominate for president-elect Dr. C. P. Zepp, Sr., of New York City. (Applause.) PRESIDENT HAGAN: Dr. C. P. Zepp, Sr., of New York City, has been nominated for the office of president-elect.

DR. ERNEST C. BAXTER (Calif.): Dr. Hagan and Members of the Association: We of California have known Dr. Zepp for a good many years. We have read his articles in the JOURNAL. We have heard his talks, seen his demonstrations at meetings. With us, his name has become synonymous with unceasing and untiling efforts for the advancement of our profession.

We feel that, coming at this time, it is an unusually great pleasure to second the homination of Dr. Zepp for the president of this Association. (Applause.)

DR. P. G. MacKINTOSH (Wash.): Gentlemen, I am not going to make a speech. I just want to second the nomination of Dr. Zepp.

want to second the nomination of Dr. Zepp.

PR. ROBERT S. MacKELLAR, SR. (N. Y.):
Dr. Hagan, Members of the American Veterinary Medical Association: It has always seemed to me that we should select with care the nominees for high office in this Association, and the man who has been nominated measures up to these qualifications. He has been active for years in his local, state, and national associations. He is an outstanding practitioner in his field of endeavor and ever ready to help his colleagues in every way by advice and work.

Coming from his home city, having known him for thirty years and being closely affiliated with him in organization work and otherwise, and having been a personal friend of his for thirty years, it gives me great pleasure to second the nomination of Dr. C. P. Zepp, Sr., of New York City, for the office of president-elect

of the greatest association in the world-the American Veterinary Medical Association.

Thank you. (Applause.)

DR. BERTRAM S. KILLIAN (Mass.): President Hagan, and Members of the American Veterinary Medical Association: We of Massa-chusetts have great faith in Dr. Zepp. We voted for him to become a member of the Executive Board from our district. I take pleasseconding the nomination of Dr. C. P. Zepp, Sr. (Applause.)

DR. LEONARD J. GOSS (N. Y.): Dr. Hagan, and Members of the Association: It is a pleasure for me also to second the nomination of Dr. C. P. Zepp, Sr., for president of this As-

sociation.

As a New York state veterinarian, I assure you that the boys in New York State, the men back home, know Dr. Zepp as well as anybody in the country, and we all can vouch

for him.

As Dr. Farquharson said, he has a full appreciation of all phases of veterinary medicine and as a practitioner, and, as you people know, he has traveled throughout the country to meetings, has always taken a keen interest in the Association. He has devoted untold hours and time of his own for the best interests of the American Veterinary Medical Association. Hence, I am pleased to second the nomination for Dr. Zepp as president-elect. (Applause.)

DR. HUGH S. CAMERON (Calif.): Mr. Presient, I move that the nominations be closed and that the secretary cast a unanimous ballot for the election of Dr. C. P. Zepp, Sr. PRESIDENT HAGAN: Is there a second to

the motion?

DR. E. A. TUNNICLIFF (Mont.): Second the motion.

PRESIDENT HAGAN: It has been moved and seconded that nominations now be closed and that the secretary be instructed to cast one ballot for Dr. C. P. Zepp, Sr., for president-elect. Is there any discussion? If not, I will ask you to vote on the question. Will those who favor this question say "aye"; opposed "no." I hear no "no's." I therefore ask that the secretary cast the unanimous ballot. Dr. Klussendorf, will you cast the ballot?

DR. KLUSSENDORF: In accordance with your instructions, I hereby cast the unanimous bal-lot of the Association for Dr. C. P. Zepp, Sr., to act as president-elect of the American Vet-Medical Association for the ensuing

erinary Medical PRESIDENT HAGAN Now we have five vice-presidents to elect. I would like to point out, unless there are more than five nominated, it will not be necessary to go through the pro-cedure of election that the secretary read about. Of course, it is up to you to decide

whether or not you wish to do this.

These vice-presidents are regarded as first, second, third, fourth, and fifth, in the order in which they are nominated. So, the first person nominated, if he is elected, becomes the first vice-president, and so on. Is that matter clear?

now declare nominations in order for vicepresidents.

DR. CHARLES J. PARSHALL (Calif.): Presi-

dent Hagan, Members of the American Veterinary Medical Association: Many who served in the armed forces during

the war know the gentleman who I am about

the war know the gentleman who I am about to have the pleasure of nominating.

President Hagan, in his presidential address today, mentioned one of the discrepancies whereby our profession was penalized by not having any priority, or being lower down in the scale than in the case of most people with technical training, so far as Civil Service was concerned.

I am referring now to the recent act which establishes the fact that the veterinary officers must start as second lieutenants in our U. S. Army, whereas those of the other branches of the medical service have a higher rating.

The man who I am about to nominate re-cently had the signal honor of being the first permanent rank general that the Veterinary Corps has ever had. He is in a position, therewhere he may be of direct help to a large number of men who have reserve officers' com-missions, and those who might be called to active duty in case of another national emergency.

He is likewise in a position to be of great help to the American Veterinary Medical As-sociation in serving in liaison capacity with the Surgeon General, and to be able, perhaps, to correct one of those deficiencies of which none of us are proud.

I therefore would like to place in nomination, as first vice-president, General J. A. McCallam. (Applause.)

PRESIDENT HAGAN: Brigadier General Mc-Callam has been nominated.

DR. E. A. GRIST (Texas): After careful deliberations, and many times in session here watching the nomination of vice-presidents, we in our state have given due and careful con-sideration to a candidate for vice-president.

I have mail coming to me from all over Texas. urging me to nominate for a vice-president, Dr. R. C. Dunn who is presently dean of the School of Veterinary Medicine at Texas A. & M. College, has been there since 1912, and has been very, very active in the veterinary affairs of our state, as well as of the nation; unfortu-nately, until recently, he was not brought out from under the barrel and given the oppor-

tunity to gather with you.

He has for the past five years been in attendance at these meetings. We would very much like to nominate him as vice-president.

(Applause.)

PRESIDENT HAGAN: Dr. R. C. Dunn of College Station, Texas, has been nominated.
Additional nominations are in order.
DR. I. S. McADORY (Ala.): I want to nominate for third vice-president Dr. R. S. Sugg. dean of the College of Veterinary Medicine, Alabama Polytechnic Institute.

PRESIDENT HAGAN: Dr. R. S. Sugg has been nominated. Any additional nominations? DR. A. E. CAMERON (Canada): Members of the Association, I should like to nominate Dr. E. F. Johnston of Ontario as a vice-president. He is a steady attendant at the meetings, conversant with its work, and is president of the Ontario Veterinary Association, well respected in his own community, and I am quite sure he will be a credit to this Association.

PRESIDENT HAGAN: Dr. E. F. Johnston of Ontario has been nominated. Are there addi-

tional nominations?

DR. ROBERT S. MacKELLAR, Sr.: Mr. President and Members: I would like to nominate Dr. L. J. Goss of New York as fifth vice-presi-dent. He is one of our active men in the east, and in his special field is an outstanding man. I take pleasure in nominating him as fifth

vice-president. (Applause.) PRESIDENT HAGAN: Dr. L. J. Goss has been

nominated.

DR. B. E. CARLISLE (Ga.): I move the nominations for vice-president be closed, and that the secretary be instructed to cast the unanimous ballot.

DR. JAMES FARQUHARSON (Colo.): Second the motion.

PRESIDENT HAGAN: It has been moved and seconded that the secretary be instructed to cast the unanimous ballot of the Association

for each of these men for the positions for which they have been nominated. Any dis-cussion? If not. I call for the vote. Those in If not, I call for the vote. Those in y "aye"; opposed "no." The "ayes" cussion? favor say have it. Therefore, I will ask the secretary to follow out your instructions.

DR. KLUSSENDORF: In accordance with your instructions, I hereby cast the unanimous ballot of the Association for the slate of five vice-presidents: General J. A. McCallam; Doctors R. C. Dunn, R. S. Sugg, E. F. Johnston, and Goss, to serve as vice-presidents of this

Association for the ensuing year. (Applause.)
PRESIDENT HAGAN: We have one additional office to fill, and that is the office of treasurer. What is your pleasure with respect to this office? Nominations are now in order. DR. B. S. KILLIAN (Mass.): I nominate Dr.

7. A. Young as treasurer.
PRESIDENT HAGAN: Dr. W. A. Young has
een nominated for the office of treasurer.

DR. O. NORLING-CHRISTENSEN (Ill.): I second the nomination of Dr. W. A. Young as treasurer.

PRESIDENT HAGAN: Are there additional nominations? If not, does somebody move that the nominations be closed?

DR. CHARLES W. BOWER (Kan.): Chairman, in behalf of Dr. Young, and the fact that he has been such an efficient treasurer, I wish to make a motion that the nominations be closed and the secretary cast a unanimous ballot in favor of Dr. W. A. Young as treasurer for the ensuing year.

DR. CHARLES J. PARSHALL (Calif.): Sec-

ond the motion.

PRESIDENT HAGAN: Moved by Dr. Bower and seconded by Dr. Parshall that the nomina-tions be closed and the secretary be instructed to cast a unanimous ballot of the Association for Dr. Young as treasurer.

I will call for the Are there any remarks? vote. All those who favor this motion say "aye"; opposed "no." The "ayes" have it.

Mr. Secretary, will you follow the instructions of the Association?

DR. KUSSENDORF: In accordance with your instructions, I hereby cast the unanimous ballot of the Association for Dr. W. A. Young to serve as treasurer for the ensuing year. (Ap-

PRESIDENT HAGAN: I believe this concludes the business of the afternoon, unless some member wishes to bring up any other matter. Any further business to be brought up?

not, will someone make a motion we adjourn? The motion was made and carried. (The meeting adjourned at 4:30 p.m.)

General Session

Thursday Morning, Aug. 19, 1948

The general session convened at 9:00 a.m., President Hagan presiding.

PRESIDENT HAGAN: I will begin by ex-plaining that it was necessary this morning to change the program somewhat. We had omit, unfortunately, the motion picture at the beginning of the session, to the disappointment of many. Later this morning we are to hear from Dr. Wendell Stanley who was to have spoken last night but could not, because of circumstances over which we had no control.

We will proceed with the program, and later in the forenoon Dr. Stanley will be given the time we would have taken for the picture.

We will hear now from Dr. S. W. Haigler of Louis, on the subject "Veterinary Ethics." St. Louis, Dr. Haigler read his paper. . . . (Applause.) (To be published.)

PRESIDENT HAGAN: Dr. Haigler had to

speak to a very small audience on an important subject, but the paper will be published, and we will have a chance to read it. That is indeed fortunate because it is an important and thoughtful paper.

We thank you very much, Dr. Haigler.
We will proceed to the second paper, "The
Air-Borne Transmission of Poultry Diseases,"
by Dr. K. B. DeOme, Department of Veterinary Science, University of California, Berkeley. Dr. DeOme read his paper. . . . (Applause.) (To published.)

PRESIDENT HAGAN: Thank you very much, Dr. DeOme, for an excellent paper which was well presented. I am sorry there is not time for discussion, but we will proceed with the

next topic.

Most of you know that several years ago the National Institute of Health, which is the research section of the United States Public Health Service, obtained rather considerable funds with which to implement research on various diseases that have relation to public country.

Veterinary medicine is included in this program, and we are happy this morning to present to you the representative who will tell you something of this program. The topi "Grant-in-Aid Public Health Research for erinary Institutions." The author is Dr. The topic Vet-Van Slyke, the director of this Division, who is unable to be present but has sent one of his

colleagues who will present the paper. I am glad to introduce Dr. David E. Price.
DR. DAVID E. PRICE: Dr. Van Slyke, who was to have been here to talk to you this morning on this subject, has, within the past few days, been appointed director of the newly created National Heart Institute, and I have succeeded him in his previous position, and I have also succeeded him in speech-making morning, . . Dr. Price read his paper. . (Applause.) (To be published.) this

PRESIDENT HAGAN: I want to thank Dr. Price very sincerely for coming here and telling us about this program. I know that a great many of the men, particularly those in the institutions, are interested in this. I know, also, that men who are practitioners, who are interested in the advancement of science in our field, are likewise interested. Thank you very much, Dr. Price.

I am pleased to announce this morning that we are to have an extra speaker, one not an-nounced on the present program. This speaker nounced on the present program. was to have appeared last evening at the din-ner but, because of circumstances beyond the control of the officers, the Program Committee, or the Local Committee, conditions were not deemed suitable to have him make the presentation then.

Therefore, Dr. Stanley, the speaker, is present his paper this morning. He is a distinguished scientist, and we are honored in

having him at our meeting.

He has recently been elected professor of biochemistry and director of the Virus Research Laboratory of the University of California. A new institute is being a new position.

built for this work.
Dr. Stanley has come west from the eastern states where he was for a number of years associated with the Rockefeller Institute for

Medical Research.

Dr. Stanley, in 1946, was the recipient of the Nobel Prize in biochemistry for his work on the crystallization of a virus, the virus of mosaic diseases of plants. This was an epochal discovery, a discovery of a new fact which has caused great stimulation in the study of virus diseases and a great increase in our knowledge of the nature of these agents.

I am happy to present to you, to introduce to most of you this morning, the speaker to whom I have just referred—Dr. Wendell M. Stanley. (Applause.) (Dr. Stanley's paper will be published in the JOURNAL.)

PRESIDENT HAGAN: As I stated in the beginning, all of us who had any responsibility for this program here were greatly chagrined and embarrassed last evening at the events that happened. We are happy, however, that we were able to have Dr. Stanley's presentation this morning, our only regret being that only perhaps 200 heard him, when last night several times that many would have had the opportunity.

Dr. Stanley, like all great scientists and other men of accomplishment, is a modest individual. You notice he stated it was his good fortune to make certain discoveries that he described. Those of us who have had anything to do with research know that there is not much luck in research. As Edison once said, it is 99 per cent perspiration and about 1 per cent inspiration. These things come only to the individuals with prepared minds.

I think Dr. Stanley has shown you this morning the type of mind that makes such epochal discoveries as he made and which has led on, opened wide avenues of research, which is leading on to a better understanding of the workings of nature.

We thank you very much, Dr. Stanley, for this presentation. It is grand, and I know

everyone here appreciates it.

Our next and last paper on the morning program will be a presentation on the topic "Preventive Veterinary Medicine." The speaker is known personally to most people here, and he is known by reputation, I know, to all of you Dr. Karl F. Meyer is a veterinarian. He has an M.D. degree as well. He has been the recipient of a great many honors, well deserved, because of the fine work he has done in many fields. He is a member of the National Academy of Sciences.

Dr. Meyer came to this country some thirtyodd years ago. For a time he was on the eastern seaboard, and then he came to California. He has been here over thirty years, which certainly entitles him to be known as a native son. Dr. Stanley says, "One wonders." There is certainly no question about it in the case of Dr. Meyer.

Dr. Meyer has been professor of bacteriology in the Medical School at the University of California for many years, and has been director of the Hooper Foundation of the University of California. I understand that recently a great dinner was held for him here, and many testimonials presented on the occasion of his retirement. I do not know whether that means retirement from some of his fixed duties, but I am sure, if I know him, it does not mean retirement from the type of work he has been doing for so many years.

I am happy to present Dr. Karl F. Meyer, who will address us on the subject, "Preventive Veterinary Medicine." Dr. Meyer! (Applause.)
... Dr. Meyer read his paper. . . (Applause.)
(To be published.)

PRESIDENT HAGAN: We just had the pleasure of listening to a fine address by Dr. Karl F. Meyer, packed with good advice, on a subject that is of great interest and concern to the veterinary profession, presented in Dr. Meyer's memorable fashion. I know it has carried a message of great value to us, and we appreciate your appearance on the program, Dr. Meyer.

This concludes the morning program except that we are to have shortly the installation of officers. I will declare a two-minute recess while we prepare, and then we will proceed with the installation.

INSTALLATION OF OFFICERS

PRESIDENT HAGAN: Will the session please come to order? The time has come when, according to our program, we are to install the

rewly elected officers.

First to be installed is your new president,
Dr. L. M. Hurt. I see Dr. E. M. Dobbs is close
to him. Dr. Dobbs, will you escort the new
president to the platform?

(President-Elect Hurt was escorted to the

PRESIDENT HAGAN: Dr. Hurt, the time has now arrived when it is my duty to install you as president of the American Veterinary Medical Association for the ensuing year. Ordinarily, in these ceremonies, it is customary for the president to present to the incoming president the gavel as a symbol of authority, but the gavel, unfortunately, seems not to have turned up this morning. (Laughter.) Perhaps that is just as well because this was going to be an Indian gift anyway.

have turned up this morning. (Laughter.)
Perhaps that is just as well because this was
going to be an Indian gift anyway.

According to our Constitution, the president
takes effice at the end of the present session.

So, it would have been an Indian gift. I
would have taken it back for this afternoon.

Knowing you, Dr. Hurt, intimately for a

Knowing you, Dr. Hurt, intimately for a great many years, having sat with you in many meetings, many committees, the Executive Board of this Association, I know that you are eminently qualified for the position to which you have been elected.

I want to congratulate the Association on electing you as a worthy individual to represent it before the world. I also want to congratulate you on this election, and I offer you my heartlest congratulations and declare you duly installed as president for the ensuing year. (Applause.)

PRESIDENT-ELECT HURT: Thank you, Dr.

Officers, Directors, Friends, Family, Ladies, and Gentlemen: I think you know how I feel. We had a fine gentleman who was chaplain of our school when I first entered Iowa State at Ames. He started many of his addresses with this remark, "This is an occasion of peculiar significance."

To me, of course, that is actually true. The meeting on the west coast has been a phenomenal one in many ways. I just saw the 2,014th registrant a few minutes ago. It seems that that is consideraby out of the ordinary. We are gratified at the turnout. We are pleased with the program that has been produced here. Outside of the untoward incidents that have happened, it has been a wonderful Association meeting. I am very glad that it came at a time when I was inaugurated.

We do not want the situation at the banquet last night to prevent a return trip. It will have to be six years before you come to the western zone, but I am going to invite you for another trip west.

I am very glad to have been inaugurated in the presence of my own family and my own friends. Thank you again. (Applause.)

PRESIDENT HAGAN: Inasmuch as Dr. Hurt does not take office immediately, it devolves upon me, even though I passed the reins to him, to install the remaining officers. So, next in order will be the president-elect.

So, next in order will be the president-elect, Dr. C. P. Zepp, Sr. Dr. Sheffield, will you escort Dr. Zepp to the platform?

(Dr. Zepp was escorted to the platform.)

PRESIDENT HAGAN: Here, again, I have the pleasure of installing an old friend, a friend of a great many years, a fellow New York Stater. Dr. Zepp is a practitioner.

As I stated in my address the other day, I have been wondering during the past year whether or not a practitioner would be able to carry the responsibilities of the position of president of the American Veterinary Medical Association and, at the same time, carry on usual business.

Dr. Zepp, I think you are going to have some difficulty carrying the two together. I mean I

first vice-president; Dr. R. C. Dunn, second vice-president; Dr. R. S. Sugg, third vice-presi-dent; Dr. E. F. Johnston, fourth vice-president, and Dr. L. J. Goss, fifth vice-president, if they will come forward.

(The various vice-presidents were escorted to the platform.)

PRESIDENT HAGAN: Apparently, Dr. Sugg is not at the meeting, and Dr. Goss, I understand, had to leave this morning. So, we have three: General McCallam, Dr. Dunn, and Dr. Johnston. I want to congratulate you gentlemen upon





At the Installation Ceremony Left-President Hagan installs his successor, Dr. L. M. Hurt, and (right) the president-elect, Dr. C. P. Zepp, Sr.

am sure that your own business is going to suffer and not the business of the Association.

I know, however, he has a good organization in New York City that is going to carry on for him, and that a year from now, when he takes office, you are going to have an individual who has long taken an interest in the affairs of this organization, the New York State Veterinary Association, the New York City Veterinary Society, and veterinary organizations in general. He is a hard and effective worker. I know he is going to be a fine president of this Association.

Dr. Zepp, I want to present my heartlest congratulations and congratulate you in behalf of the American Veterinary Medical Associa-

tion. (Applause.)
I now declare Dr. Zepp duly installed as

president-elect of the AVMA. (Applause.)
PRESIDENT-ELECT ZEPP: Mr. President it is difficult for one at a time like this to formulate expressions which will deeply convey my appreciation for the election to this high office. All I can say is that I do appreciate it greatly.

I do not accept this honor, though, without a certain amount of responsibility. I realize the responsibility the veterinary profession has to the public, as our previous speaker stated clearly to us. I also realize my responsibility to the veterinarians who make up this great body of men. For that reason, with their help, I hope that I can carry on this office, help, I hope that I can carry on this office, such an important office, to the credit of every-body and to meet the demands that are put on us by the public at large. I again want to thank you all. (Applause.)

PRESIDENT HAGAN: Now we come to the

installation of the several vice-presidents, five I am afraid they are not all here in number. this morning. I think at least one has left, but I am going to ask these men, General McCallam,

your election as vice-presidents of this Association. I now declare each of you duly installed in the office to which you were elected. General McCallam as first vice-president; Dr. Dunn as second vice-president, and Dr. Johnston as fourth vice-president. The other two ton as fourth vice-president. The other two gentlemen, Dr. Sugg, third vice-president, and Dr. Goss, fifth vice-president, we will install in absentia.

I now declare these gentlemen duly installed in the offices to which they were elected. (Applause.)

the other officer is Dr. W. A. Young Now, Will someone sitting next to as treasurer. Dr. Young escort him?



At the Installation Ceremony President Hagan (right) installs the treasurer, Dr. W. A. Young

(Treasurer Young was escorted to the platform.)

PRESIDENT HAGAN: Dr. Young, you have served the American Veterinary Medical Association well as its treasurer and, in recognition of the fine service that you have given and the ability you have shown in this position, the Association has seen fit to reëlect you to this position. We appreciate the efforts you have put forth. We know that you are going to serve well in the coming year.

the ability you have shown in this position, the Association has seen fit to reflect you to this position. We appreciate the efforts you have put forth. We know that you are going to serve well in the coming year.

I want to congratulate the Association and especially congratulate you, Dr. Young, for your willingness to continue in this position. I now declare you, Dr. Young, duly installed as treasurer for the ensuing year. (Applause.)

Ladies and gentlemen, this concludes the ceremonies of the morning. This afternoon we have a fine program, with some outstanding speakers. I think we have had a fine program this morning. We are going to have one equally as good this afternoon.

The meeting is adjourned.
(The meeting adjourned at 12:10 p.m.)

General Session

Thursday Afternoon, Aug. 19, 1948

The general session convened at 1:30 p.m., President Hagan presiding.

PRESIDENT HAGAN: The first topic of this afternoon is one in which we all have a great deal of interest, the foot-and-mouth disease situation. The speaker is Dr. M. R. Clarkson of the Field Inspection Division of the Bureau.

of the Field Inspection Division of the Bureau.
Dr. Clarkson has been in close contact with the situation and should have the latest information for us. Dr. M. R. Clarkson. (Applause.)
DR. M. R. CLARKSON: Thank you, Dr. Hagan.

It is a great privilege and pleasure for me to be here to talk before the annual meeting of this Association. It is especially a privilege to have the opportunity to come to the West Coast because my home is here. Having been stationed in Washington for several years, I really appreciate the climate and the friendliness and everything else that goes with the west. Perhaps not all of you will agree with that, but in California I think we can find plenty of "ayes." . . Dr. Clarkson read his paper. . . (Applause) (To be published.)

PRESIDENT HAGAN: You have listened to a paper from Dr. M. R. Clarkson of the Field Inspection Division of the Bureau, who has brought us up to date on the foot-and-mouth situation, the development of vaccines, and other developments that are of interest to all of us. Thank you very much, Dr. Clarkson, for your presentation.



At the Installation Ceremony

Left to right—Dr. E. F. Johnston, 4th vice-president; Dr. R. C. Dunn, 2nd vice-president; Brig. Gen.

J. A. McCallam, 1st vice-president; and Dr. W. A. Hagan, retiring president.

Now we are going to listen to one of our colleagues from abroad. It gives me particular pleasure to introduce the speaker, since it was twenty-three years ago this fall that I first met him in Copenhagen, when he was kind enough to include me in the tour of the rural areas of Denmark. I became very well acquainted with him and some of his colleagues.

Fortunately for us, he is visiting in this country and we were able to persuade him to come to San Francisco to speak to this group.

Professor W. M. Mitchell was professor of veterinary surgery a great many years in the Royal (Dick) Veterinary College in Edinburgh. He is now principal of that school, senior vicepresident of the Veterinary Medical Association of Great Britain and Ireland. He is a dis-tinguished veterinarian from abroad, and we are happy to have him here.

Professor Mitchell, we will now be pleased to hear from you on the subject "Veterinary Education in Great Britain." (Applause.)

W. M. MITCHELL: Mr. President, Ladies and Gentlemen: I am going to take the op-portunity, before I start my paper, to break in and thank your president and the whole of the Association for their great kindness to me. And, on behalf of the association which I am representing here today, I also wish to bring greetings from the National Veterinary Medical Association of Great Britain and Ire-

We have for the last two years had representatives from your Association at our meet-

ings in Great Britain.

Now the topic which I have been asked to say a few words about, "Veterinary Education in Great Britain," may be rather strange to many of you because, naturally, our problems But I have had the opportunity in the last three weeks of going around to a number of your universities and colleges, and I am singularly impressed with the difficulties which your colleges are meeting, and they are exactly parallel, in many places, to what we are meeting. Naturally, every place approaches its problem in a different way, to try to get a solution.

I think that experiments carried out in diverse places are good for everybody, and that is why I am here to see how you are experimenting and, if possible, to avoid pitfalls which you may perhaps fall into, by retaining that Scottish caution of letting you do the experiment and we will take the result. (Laughter.)

Well, ladies and gentlemen, my topic, "Veterinary Education in Great Britain," may be strange to you but, if you will allow me, I will proceed Dr. Mitchell read his paper. . . . (Applause.) (To be published.)

PRESIDENT HAGAN: Professor Mitchell, we

are warmly appreciative of your interesting and instructive address. I understand you are returning soon to your home, country. 1 you would convey to your colleagues of the British Isles the cordial greetings and best wishes of their colleagues in America—the American Veterinary Medical Association. We are happy to have had you, sir, and hope you will return shortly.

The next two papers are symptomatic of the atomic age in which we are now living. splitting of the atom has created a series new substances known as isotopes, radioactive isotopes that we know have great potentiali-W do not know just what all these po-lities are. So, the study of these is at ties. tentialities are. the present time an active subject in this country. A great deal of it is going on in medicine, work on cancer research, and so on, some in veterinary medicine. We wish there were more. However, there is some work going on. You are to hear next from one of the

men working on this subject, Logan M. Julian, Berkeley, on "The Importance of Radioactive Isotopes in Veterinary Science." Dr. Julian! . Dr. Julian read his paper. . . . (Applause.) (To be published.)

PRESIDENT HAGAN: Thank you very much, Dr. Julian. To those of us who studied physics and chemistry when the atom was the ultimate unit of matter, it is a little bit bewildering, and I assume it is to most people other than assume it physicists and chemists, to realize the whole universe seems to be a mass of whirling atoms, from the planets that whirl around the sun down to the little electrons and neutrons and protons that spin around inside the things. It is no wonder that we are dizzy.

We are going to hear more about this matter. I think we have to learn sometimes it. It fits into the plan of nature that probably I think we have to learn something about goes through all matter. It impresses me that they are getting at some things we have missed heretofore. Therefore, this matter of isotopes, these split atoms, and so on, are going to be of increasing importance to us all.

We come to the last paper, "Atomic Warfare and the Veterinary Profession," by Colonel

W. O. Kester and Major E. B. Miller of the Army Veterinary Corps, Washington. I under-stand neither of these men is here, but I be-lieve somebody has the paper. Is General Mc-Callam here?

GENERAL McCALLAM: I was going to read but I have to catch an early train. Major Jones will read the paper. There are two films following it.

PRESIDENT HAGAN: Major Jones will present the paper, and then we have motion pictures that will follow. . Major Jones read the paper prepared by Colonel Kester and Maor Miller. . . . (Applause.) (To be published.)
PRESIDENT HAGAN: We will now have the jor Miller. . .

motion pictures. (Showing of motion pictures, "Ope Crossroads," and "Radiological Safety.") "Operation

plause.)

PRESIDENT HAGAN: We are indebted to Veterinary Division of the Office of the General of the Department Army for these highly official military films and for the paper that you heard. We trust that we may not have to face some of these things in the future but, inasmuch as we have an uncertain world, none of us are so foolish, I think, as to believe that we may not face it; at least we should be prepared.

This concludes the program. Before adjourning, I should like to say that I believe we had a larger attendance of the House of Representatives at this meeting than we have ever had at any previous meeting of the AVMA.

I am informed that the registration has ceeded 2,000, which is not a record but it is at least 25 per cent greater than the most optimistic forecasts for a meeting this far from the center of the veterinary population of this continent.

In spite of the occasional rough spots, think it has been a very successful meeting. The people who made the arrangements for worked hard and very successfully.

The House of Representatives on Tuesday evening adopted a resolution expressing appreciation to the local association, the local groups, the veterinarians of San Francisco and of this region, and of the state of California, but I think it only appropriate that I express again appreciation of the efforts which have made this meeting so successful.

PM

I now declare the Eighty-fifth Annual Session of the American Veterinary Medical As-sociation to be adjourned. (Applause.) (The meeting adjourned at 4:50 p.m.)

Veterinary Aspects of Atomic Explosion

COLONEL WAYNE O. KESTER, V.C., and MAJOR EVERETT B. MILLER, V.C. U.S. Army

THIS IS NOT a technical paper on atomic explosion but rather an attempt to express in simple terms, the conditions that a veterinarian might see, were he called to an area where an atomic bomb had recently ex-Some of the unsolved problems ploded. confronting the veterinary profession are mentioned, and such meager facts as are known about atomic explosion with respect to veterinary medicine are set forth. It is hoped that the reader may rationally grasp the significance of atomic explosion to veterinary medicine and realize that atomic warfare, destructive as it is, is a thing for which we can and must be prepared.

No two of the five atomic bomb detonations which the world has thus far seen have been exactly alike. The type of burst has varied from several hundred feet above the surface of the earth to several feet under water, and two types of bombs, 'uranium 235 and plutonium, have been employed. As might be expected, certain aspects of the results varied materially in each instance. However, from the standpoint of veterinary medicine, these variations seem to make little difference in end results. Nor does it appear that the development of larger or new type bombs or changes in the methods of employment would greatly affect the picture in so far as the veterinarian is concerned. He will still be faced with the same entities and problems, the variables being chiefly those of quantity and degree.

TYPES OF INJURIES

Although large numbers of animals have not been exposed to atomic explosion, there is no reason to believe that the effects will vary greatly from those seen in man. Casualties will be due to blast, burn, or radiation, but more probably a combination of all three. Blast and burn injuries, both

physical in nature, will be little different than when produced by other conventional explosive type weapons or other means, except that they will be of greater magnitude in number, extent, and degree than seen elsewhere.

Primary shock or blast damage, defined as the compressive and tearing action of the shock wave on the living body, is seldom seen. Secondary shock or blast damage is the more important and is caused by the living body being blown against an object or by the millions of pieces of flying timber, glass, rock, and other debris driven by the terrific explosive force of the bomb burst, estimated to be greater than that of 20,000 tons of TNT.

Flash burn injuries will result from the direct effect of the heat flash radiated simultaneously with the explosion, a radiant energy estimated to be, for an instant, many times greater than that of the sun. If buildings or other combustible materials are present in the area, flame burn injuries due to the numerous fires started by the explosion and flash will be a serious problem also.

The third type of injury, ionization of tissues caused by nuclear radiation, is the new entity in the picture. An individual may absorb radiation from external sources. i.e., when the source of the radiation is outside of the body and the rays penetrate the skin and deeper tissues, or he may absorb it from internal sources as is the case when the source of the radiation (radioactive material) is taken into the body by ingestion, inhalation, or through a break in the skin, and remains as a constant source of ionizing rays until eliminated or neutralized by normal radioactive decay. This latter is most serious because once radioactive substances have been taken up by the body there is no means of effecting removal.

Chief sources of radiation damage are the gamma rays, alpha particles, beta particles, neutrons, and other fission products released by the bomb detonation. It is estimated that approximately 99 per cent of the total radiation damage occurs simultaneously with the explosion which, in

Acknowledgement for the basic precepts of atomic warfare in veterinary medicine is given to the several lecturers and recognized authorities who appeared at the Medical Indoctrination Courses in the Medical Aspects of Atomic Explosion, sponsored by the Armed Forces Special Weapons Project, that were given recently at the Army Medical Department Research and Graduate School, Army Medical Center, Washington, D. C.

effect, might be likened to the instantaneous exposure to tons of radium or a gigantic x-ray machine emitting lethal rays. This is known as prompt, or immediate, radiation.

The balance of the radiation (delayed radiation) damage occurs subsequent to the detonation of the bomb and is caused by residual contamination. There are two ways in which residual contamination may occur. One is by objects in the vicinity of the bomb burst "capturing" neutrons and thereby acquiring radioactive properties and the ability to emit lethal rays. The other way is by fission products and other radioactive material, almost all of which exist on particles of dust or droplets of water, settling out of the atomic bomb cloud. These particles, which continue to emit lethal rays, may settle to the ground near the bomb explosion or may drift many miles with the cloud before settling or dissipating.

RADIATION SICKNESS

The amount and duration of this residual contamination varies with the type of bomb, altitude of the burst, and rate of radioactive decay of the elements activated. Where the explosion is close to the ground, residual contamination may be present for some time. In Japan, where the detonations were at a fairly high altitude, there was very little detectable radioactivity after a few days. In New Mexico, radioactive particles settling out of the bomb burst cloud, after it had drifted some 50 mi. from the explosion, affected a herd of Hereford cattle mildly, resulting in their hair turning white.

Thus, it is apparent that unlike the causes for blast and burn injury, the cause for radiation sickness does not end with the dissipation of the bomb blast. It is also obvious that lethal exposure from external as well as internal radiation can occur in a contaminated area for some time subsequent to the explosion.

With bombs such as the two used in Japan, blast injuries may be expected in animals as far as 5 mi. away from the center of the explosion, and flash burn injuries may be expected as far as $2\frac{1}{2}$ mi., except in animals which happen to be shielded from the detonation by some very substantial object. Exposure to the mass radiation generated simultaneously with the explosion will prove to be lethal for a distance of approximately 1 mi.

A means of differentiating animals lethally exposed to radiations from those sublethally exposed remains an unsolved problem. Consequently, the customary practice of promptly destroying sick and injured animals which are beyond repair, and treating only those which may recover, becomes most complicated, especially if large numbers are involved and only a limited number can be treated. Evidences of radiation sickness, unlike those of burn and blast injuries, will be little noticed initially. Symptoms will become increasingly more evident for several days, and the peak death rate caused by radiation sickness will be reached during the second or third week following the blast. Extensive observations of the symptoms of radiation sickness in man were possible following the mass exposures in Japan. Comparable observations in masses of animals have not been possible. Such studies as have been made indicate that the symptoms, especially in the smaller animals. are quite similar to those in man.

Clinical symptoms include vomiting, inappetance, diarrhea commencing several days after exposure and later becoming bloody, irritability, skin changes, loss of hair, purpura, and progressive weakness. Within twenty-four to seventy-two hours following a heavy exposure, a marked decrease in the total lymphocyte count is evident. Other marked changes occur in the blood picture but seem to be less constant, and their full significance has not yet been determined. On autopsy, petechial and ecchymotic hemorrhages, and hematomas are observed in all parts of the body. Anemia, secondary infections, or toxemia due to autointoxication from dying tissues act individually or in combination to cause death. Those which die within a few days following mass exposure may show no pathognomonic changes on autopsy. Those living from two to six weeks will exhibit most of the above symptoms.

The appearance of the devastating physical damage wrought in the bomb blast area has been well described in the public press. All visible blast and fire damage is due to the explosive force and flame flash of the detonation or to secondary fires. In cities, secondary fires may be expected to reach holocaust proportions. That which does not meet the eye—radioactive contamination of the area—is the third type of damage. It is a new entity in veterinary medicine. It is a decisive factor in deter-

mining the speed and effectiveness with which relief and salvage operations may be conducted.

TYPES OF NUCLEAR RADIATION

There are different types of nuclear radiation, each with different properties, but all effecting the same end result in the living body, i.e., the destructive ionization in protoplasm. Gamma rays which produce most of the damage simultaneous with the explosion have properties quite similar to x-rays but have far more power of penetration. Neutrons, also emitted with the explosion, have great penetrating power and have the added ability to induce radioactivity in certain elements which they enter. This occurs near the point of detonation only and results in an added source for gamma radiation. Beta particles are also emitted by the bomb burst and by the decaying fission products released by the burst. Beta particles have practically no penetrating power and are of little danger externally; however, beta emitting materials provide a serious hazard if absorbed internally. The alpha particle has even less penetrating power than the beta particle, but constitutes a greater hazard if it gains entrance to the body through ingestion, inhalation, or wounds.

It is evident that those supervising activities in a contaminated area must fully understand the source and significance of each type of radiation, and be able to determine the types and amounts of each present. While the detection of radiation contamination is impossible without the use of special instruments designed for the purpose, it is a simple matter when they are used. There are several types of these devices, varying in size from that of a fountain pen to that of a large camera case. Though there is no relationship, they might, in operation, be likened to the use of the common light meter employed by photographers, and are no more difficult to understand or interpret. The more useful of these monitoring devices are the Lauritsen electroscope, the pocket dosimeter, the Geiger-Muller counters, photographic film, and ionization chambers. By proper use of these and other devices, it is possible to determine the type or types and amount of radioactivity present and to determine how much an individual is being exposed. All such detection meters are being improved and will be the key tools in disaster relief

and salvage operations in determining where and how long personnel and animals may work in a contaminated area.

Decontamination is an unsolved problem. Unlike the situation with poisonous gases, there are no known neutralizing agents. The only alternative is to allow contaminated areas or objects to go through normal radioactive "decay." It may be feasible, in some instances, to speed up decontamination of an area or object by washing away, carrying away, or burying the active material.

A term frequently heard in connection with radioactive decay is the "half life," which is merely a means of expressing rate of decay. If an object is said to have a half life of twenty-four hours, it means that the rate of decay is such that the radioactive properties of the object will be reduced by one-half during any 24-hour period, i.e., after twenty-four hours only 1/2 of the radioactive properties would remain, in forty-eight hours only 1/4 would remain, in seventy-two hours only 1/8, and so on. A half-life may be anywhere from a few seconds to many years, depending upon the physical properties of the object. For example, indium decays rapidly, having a half life of seventy-two seconds, radioactive iodine of eight days, while plutonium decays slowly, having a half life of 24,300

RELIEF AND SALVAGE OPERATIONS

It is apparent that there is a safe and logical approach for relief and salvage operations in a bombed area. To prevent relief parties and a curious populace, as well as inhabitants of the bombed area, from moving contaminated materials into uncontaminated areas, thereby spreading the hazard, and to prevent such personnel from unwittingly becoming overexposed to radiation, it is obvious that any bombed area must be quarantined. It would be necessary for some authoritative governmental agency, organized and equipped to administer disaster relief on a large scale, to take charge, establish the quarantine area, and enforce the quarantine.

The amount of radiation which man can tolerate without ill effects is sufficiently well known to allow rescue and salvage parties to work in contaminated areas in complete safety if they take proper precautions. Using the special radioactivity detecting devices at hand, it will not be difficult to

determine when the tolerance dose has been reached and to stay within known limits of safety from exposure. The greater the degree of contamination, the faster the exposure and the shorter the period of safety will be in the area. There are no practical protective devices or protective clothing which relief workers may use. Clothing provides some mechanical shielding but readily becomes contaminated and must be discarded. The same is true of gas masks which also afford a degree of protection by filtering out radioactive material.

VETERINARY PUBLIC HEALTH PROBLEMS

While the foregoing answers many general questions, it does not offer a solution to the many very real and very perplexing problems in veterinary medicine which one may readily visualize. Probably the biggest and certainly some of the most pressing of these problems will lie in the veterinary public health field in instances where large stores of food or large numbers of animals have been subjected to direct or massive delayed radiation as might be the case were an atomic bomb to explode near any of our large meat packing or food processing centers. These possibilities give rise to a maze of questions as to means and methods of protecting, decontaminating, and salvaging food supplies and food-producing animals. A partial answer to many of these speculative questions may be found piecemeal in existing reports, but there is no over-all analysis, pattern, or procedure to guide the veterinarian.

There are many other problems purely within the realm of veterinary medicine, such as what to do with animals, hay, grain, pasture lands, buildings, and equipment which have been exposed to radiation contamination. The veterinarian will be called upon to assess the hazard and advise the stockowner as to what course to pursue with respect to grazing on contaminated pastures, feeding contaminated hay and grain, and using contaminated facilities and equipment. He will also be called upon to diagnose, prognose, and treat animals which have received varying degrees of exposure, and he will be expected to make sound recommendations as to the most humane, practical, and economical means of disposing of such animals. In addition, he will be expected to assess the biologic effect of such radiation with respect to future productivity and reproductivity of the animals. Here again there is very little in print in usable form that will be helpful as a guide to the veterinarian confronted with these situations.

Just how to enlighten the veterinary profession and better prepare it for possible eventualities of atomic warfare is a debatable question. A careful and continuing study by one or more individuals who can evaluate and disseminate information in a form understandable and of direct interest to the unindoctrinated veterinarian seems to be indicated. Possibly scholarships for veterinary students or veterinarians sponsored by the AVMA or by veterinary schools offer the best solution.

WHAT THE VETERINARIAN SHOULD KNOW ABOUT ATOMIC EXPLOSION

There are several not too complicated things the veterinarian should know about atomic explosion. He should have a general idea as to the capabilities and limitations of an atomic bomb and atomic warfare so that he may understand his own capabilities, visualize possible effects and demands upon his professional service, and soundly appraise his own position in the over-all picture. He should have conversational knowledge and some idea as to how the effects of the atomic explosion are manifested so that he may understand, converse, and exchange information and instructions intelligently with others engaged in related aspects of atomic explosion and so that he may visualize possible effects under varying circumstances on public health, food supplies, water, and livestock, as well as the agricultural and food industries in general. He should know the sources, characteristics, and differences in action of alpha, beta, gamma, and neutron radiation, because it is only with such knowledge that he will be able to evaluate the situation and give sound advice. It is also necessary for him to understand the requirements for personnel protection and to realize safety limitations. He must understand the types of radiation in order to be able to interpret the significance of any given type or amount present, with relation to his own activity and safety. It is only with such knowledge that he may confidently approach problems in connection with food supplies and animals.

During the past few months, several one-week indoctrination courses in the med-

ical aspects of atomic explosion have been given at the Army Medical Department Research and Graduate School, Washington, D. C. These courses are designed primarily for the medical officer to orient him in the handling of casualties. Medical officers of all services from all parts of the country have attended these courses, and on return to their stations have imparted their knowledge to the medical officers of their commands. A few civilian doctors from medical schools and several Army Veterinary Corps officers have also attended this course.

While this paper has left many questions peculiar to veterinary medicine unanswered. it has given a general picture of what might be expected, and it is hoped that it may stimulate further study and dissemination of information within the veterinary profession on the veterinary aspects of atomic explosion. The imaginative mind promptly visualizes the terrific impact atomic warfare might have on the livestock and food industries and the ramifying studies indicated in connection therewith. Important also are studies of the longrange effects of nuclear radiation on soils, pasture lands, and livestock; as well as studies as to the possible uses of atomic energy in the peacetime pursuits of veterinary medicine.

Bibliography

Special Projects Division, Office of The Surgeon General, Department of the Army: What Every Medical Officer Should Know About the Atomic Bomb. I. Introduction to Nuclear Physics. Bull. U. S. Army Medical Department, 8, No. 3, (March, 1948):187-198. (This is the first of a series of ten papers to be published.)

Medical Division, U. S. Strategic Bombing Survey: The Effects of Atomic Bombs on Health and Medical Services in Hiroshima and Nagasaki. U. S. Government Printing Office, (March, 1947).

Government Printing Office, (March, 1947).

Chairman's Office, U. S. Strategic Bombing Survey: The Effects of Atomic Bombs on Hiroshima and Nagasaki. U. S. Government Printing Office, 1946.

Office of Mr. Bernard M. Baruch, U. S. Representative to United Nations Atomic Energy Commission. The International Control of Atomic Energy; Scientific Information Transmitted to the United Nations Atomic Energy Commission—June 14, 1946 to October 14, 1946. U. S. Government Printing Office. Department of State Publication 2661.

French horses have won the English Derby two years in succession; this year, the first and second places of the big event. A noted authority on horse breeding attributes the numerous victories of French horses on British race tracks to the superiority of the pastures of France.

Salivary Amylase Deficiency

Impediments of mastication habits, dental disorder, hyposalivation, tough forage) are frankly conceded to impair the health of animals. In the farm herbivores, mono- or polygastric, it has long been realized that growth, gains, vigor, health, and the very profits of livestock farming depend upon the admixture of carbohydrates and salivary amylase (= ptyalin) in the oral cavity and their prompt conversion into nutritive sugar. That is, the saccharogenic action of saliva is a fundamental process of normal life. Except that which is converted by the amylolytic enzyme of the pancreas, the process is but a matter of two to four minutes. The digestive time of salivary amylase has been well established in vitro, and it has been shown recently by tests in vivo that the time and the completeness of the starchsugar conversion varies considerably with the potency and quantity of amylase saliva contained, and moreover that delayed (incomplete) conversion may be the cause of given pathologic processes. In the study (J. Am. Pharm. A., May, 1948) of skin eruptions in 45 patients, the digestive time of salivary amylase ranged from six minutes to one hour. The variation suggested to the authors that there was a relationship of the eruptive skin disease at hand and the sluggish amylolysis. In the face of the large intake of carbohydrate by animals, its crude state, and the importance of its prompt and reliable conversion in the animal economy, this finding cannot be ignored in animal pathology. Deficient salivary amylase could be implicated in many a clinical phenomenon of veterinary practice. It is reasonable to suppose that sluggish starch-sugar conversion may be more farreaching than mere loss of nutrition. The pathology of gastric, hepatic, pancreatic, and intestinal juices has been more critically studied than that of saliva. In speculating on every conceivable factor related to canine dermatoses, for example, salivary amylase has never been suspected, notwithstanding the many toxic metabolites of the CHO radicals known to have etiologic significance.

In experiments at the State College of Washington, pigs on a thiamin-deficient ration made poor weight gains and required more feed per unit of gain.

The Present Status of Penicillin in Veterinary Medicine

JOHN H. COLLINS, D.V.M.

Washington, D. C.

BECAUSE of the restrictions necessitated by inadequate supplies of penicillin and extensive demands for it in human medicine during World War II, investigations of the veterinary applications of this antibiotic agent lagged far behind those made by the medical profession. After the close of hostilities, however, sharply increasing supplies available for veterinary use gave rise to widespread utilization of the drug in animals. As a consequence, there appeared in various veterinary journals numerous articles reporting results of varying degrees of success with differing amounts of penicillin. Some of these reports are well founded on factual data while some are impressionistic, obviously having been based on observations of cases which very well might have recovered had no therapy been used other than the additional supportive treatment frequently employed. The net result is a confusing hodge-podge of widely divergent optimum dose-ranges for the many livestock diseases allegedly amenable to the activity of penicillin. The primary purpose of this paper is to attempt clarification of a muddled situation and, in so far as possible, establish a simplified dose schedule which should prove effective for the majority of diseases caused by penicillin-sensitive organisms. It is anticipated that issue will be taken in various quarters, but direct hits and near misses will be welcome if the ultimate gain is uniformity and absence of confusion in this important field. Certainly, present-day practitioners of veterinary medicine will do well to keep abreast of the scientific progress constantly being made in the profession and to be ever on guard against relying too freely on information not adequately supported by scientific fact.

It may be pointed out that the individual practitioner alone is in a position to follow the progress of his cases and to judge the

adequacy of the treatment being used. Nevertheless, he may be misled by improperly supported reports of the successful use of penicillin in amounts of questionable adequacy into skimping on the initial dosage. Therefore, he must not overlook the undesirable results inherent in, and frequently brought about by, too low dosage of penicillin. We are all aware that occasional reports from the field of human medicine bring to light instances of the development of a pathogen, ordinarily very sensitive to penicillin, into a strain which is extremely resistant to even massive doses. Usually, the development of the resistant strain is attributed to the failure to use initial doses of penicillin in numbers of units sufficient to establish adequate therapeutic blood levels and to use enough at proper intervals to maintain blood levels sufficiently long to accomplish the desired results. Unfortunately, all too frequently, the organism thus changed is one against which other antibiotic agents, sulfonamides, and other known drugs are relatively ineffective. The progress of such a case hardly needs describing; an expensive, protracted illness, death of the patient, or both. It is selfevident that, in such a case, the penicillin which was used is utterly wasted. Since massive doses of the drug can be administered with safety (as much as 100 million units per day have been given to human beings), and since improved methods of production have lowered the cost considerably, there seems to be no valid reason for taking the risks of underdosing a disease condition caused by penicillin-sensitive organisms. In general, the dosages reported in the bulk of the veterinary literature, especially for intramuscular and intravenous injections, appear to be very low.

Recognition must be given to the fact that therapeutically effective blood levels, being influenced by many factors, cannot be determined by any rule of thumb. Adequate penicillin dosage and duration of treatment will vary from one patient to another, depending on the organism involved, its relative sensitivity to penicillin,

Presented at the quarterly meeting of the District of Columbia Veterinary Medical Association, Apr. 14, 1948.

Veterinary Medical Section, Food and Drug Administration, Federal Security Agency, Washington,

the severity and stage of the infection, and the age and general condition of the patient. The work of Doll and Dimock1 reveals that a blood concentration of 0.03 unit/cc. should prove effective against most strains of streptococci and staphylococci in horses. These workers also show that concentrations of 2 to 4 units/cc. were required for effectiveness against Shigella equirulis, and 8 to 10 units/cc. for Corynebacterium equi. It must be remembered also, that penicillin is excreted rapidly in the urine and that it may be impossible to detect any in the blood three to four hours following a single dose of as much as 500,000 units in a horse. In any event, the objective in every case should be to bring the infection under control as quickly as possible.

In the Veterinary Medical Section of the Food and Drug Administration, it is believed that the labeling of penicillin for veterinary use should recommend an absolute minimum dosage in terms of units per pound of body weight for the treatment of acute systemic disease conditions caused by the more sensitive organisms, such as most streptococci and staphylococci. This belief is based on a careful review of available information having a valid bearing on blood concentrations established and maintained by various quantities of penicillin parenterally administered to the several domesticated animals, the various organisms sensitive to the action of penicillin, and the degree of their relative sensitivity. Of course, such a recommendation for a minimum unit-perpound dosage should point out that systemic infections caused by more resistant organisms and infections caused by relatively sensitive organisms, but not treated early in the acute stage, will require larger amounts to establish and maintain therapeutically effective blood concentrations. Such a recommendation should also carry the admonition to increase materially, perhaps even double, the minimum dosage should there be no definite signs of clinical improvement, in a condition known to be caused by penicillin-sensitive organisms, twelve to fourteen hours after the initial dose

On the basis of the most reliable information now available, a minimum of 2,000

units of the sodium, calcium, and potassium salts of penicillin per pound of body weight every three to four hours, if reconstituted in an aqueous vehicle, is required to establish and maintain an approximate 0.03 unit/cc. blood level which generally may be regarded as therapeutically effective for conditions caused by most strains of the more susceptible organisms. If suspended in a vehicle permitting slow absorption, such as the oil and wax types, the total dosage may be given once a day, or in severe infections twice daily. It must be remembered, however, that 0.03 unit/cc. is the least detectable penicillin concentration when the standard potency test organism, Bacillus subtilis, is utilized, and cannot be regarded arbitrarily as therapeutically effective in every systemic infection caused by organisms susceptible to the activity of penicillin, even the very sensitive strains. The dosage required for effective blood levels in infections caused by organisms such as C. equi renders the treatment of such conditions with penicillin impracticable.

Many will be of the opinion that 3,000,-000 units of penicillin for a 1,500-lb, horse and 100,000 units for a 50-lb. dog appear excessive, but in the Food and Drug Administration it is believed that requiring a minimum unit-per-pound dosage to be borne by the labeling of penicillin for veterinary use is the only practical approach to a workable method of minimizing the undesirable results invited by inadequate dosage. This is particularly necessary in view of the fact that sales of penicillin for use in animals are not restricted, under federal law, to licensed veterinarians trained in the diagnosis and treatment of livestock diseases.

Bovine mastitis caused by Streptococcus agalactiae continues to be the No. 1 disease condition for which penicillin is used The literature as a therapeutic agent. is replete with various methods of employing penicillin for treatment of this condition. Under date of Oct. 5, 1945, the Food and Drug Administration, in connection with its activities in the penicillin certification project, issued a release to manufacturers and distributors of veterinary penicillin which incorporated a recommendation for dosage of, and duration of treatment with, penicillin in bovine mastitis. While much of that release is now unquestion-

¹Doll, E. R. and Dimock, W. W.: Penicillin Dosage and Blood Levels for the Horse, J.A.V.M.A., 108, (1946): 209-214.

ably out of date, particularly with respect to the parenteral use of the drug, there appears to be no good reason to supersede the recommended dosages for the treatment of Str. agalactiae mastitis which are as follows:

From a consideration of all the available experimental data, it is believed that the following dosage can be depended upon in most cases of mastitis to free the infected quarters from Streptococcus agalactiae: 25,000 to 30,000 units diluted in sterile distilled water injected under aseptic conditions into each quarter of the infected udder after each milking to be repeated every twelve hours until five to seven treatments have been administered. In chronic bovine mastitis without induration, injection of 25,000 to 30,000 units of penicillin into each quarter of the infected udder and repeated in twelve hours may eliminate the infection in a majority of the cases due to Str. agalactiae. In chronic indurative mastitis the treatment should be repeated at twelve-hour intervals five to seven times.

On Apr. 25, 1946, the Administration issued a supplemental release from which the following is quoted:

In accordance with recent advances in information regarding the use of penicillin in veterinary medicine the following proposed dose pattern has been suggested for the treatment of mastitis of cattle caused by Streptococcus agalactiae: "For maximum results, the quantity of penicillin administered per quarter should be based on production. For cows producing up to 40 lb. of milk a day, a total of 100,000 units of penicillin should be given per quarter. This may be divided into five doses of 20,000 units given at twelve-hour intervals or four doses of 25,000 units given every twenty-four hours. For udders producing over 40 lb. of milk per day or in cases of acute mastitis, a total of 200,000 units per quarter is desirable. This should be divided into four doses of 50,000 units each, given at 24-hour intervals. To prolong the duration of stay of the penicillin in the quarter, it may be desirable to skip one milking after the last injection in a series. volume of vehicle should be adequate to favor immediate distribution of the penicillin over the cistern area. Usually 50 cc. is adequate, but in large quarters or in acutely swollen quarters 100 cc. may be desirable." This revised dose pattern for the treatment of bovine mastitis due to Str. agalactiae may be included in the next revision of your labeling for sodium and calcium penicillin for veterinary

In the near future, a completely revised release will be issued to manufacturers and distributors of veterinary penicillin

which will supersede the previous releases. In addition to the existing recommendations for the use of penicillin in Str. agalactiae mastitis of cattle, there will be an additional alternative dose pattern presented which will suggest the treatment of all quarters infected with Str. agalactiae with three daily intramammary infusions of penicillin as follows: Large udders-first day, 200,000 units per infected quarter; second and third days, 100,000 units per infected quarter each day. Small to moderate sized udders-first day, 100,-000 units per infected quarter; second and third days, 50,000 units per infected quarter each day. It will also suggest that all quarters infected with Str. agalactiae at the termination of the lactation period should be infused with 100,000 to 200,000 units of penicillin sometime during the nonlactating period, preferably during the interval between two weeks after the last milking and three weeks before parturition. The revised release will also provide for other certifiable forms of penicillin such as bougies, containing not less than 25,000 units of penicillin per bougie and intended for insertion into the milk cistern via the teat canal, oil and wax suspensions,

Since the therapeutic efficacy of penicillin in mastitis caused by staphylococci is poor to only fair, it can hardly be regarded as a dependable treatment for this form of the disease.

The organisms commonly commanding the interest and attention of veterinarians and which have been shown to be sensitive to the action of penicillin are most strains of streptococci and staphylococci, Clostridium welchii and other clostridia, actinomyces, Bacillus anthracis, Erysipelothrix rhusiopathiae, corynebacteria, and leptospira. While Str. agalactiae mastitis of cattle probably remains the only disease condition for which the therapeutic efficacy of penicillin has been definitely established by adequate scientific experiments, many published reports indicate that the parenteral use of the substance may be of some value for leptospirosis, osteomyelitis, peritonitis, strangles, pneumonia, tetanus in the very early stage (with antitoxin), calf pneumonia and diphtheria, blackleg, and malignant edema. One hundred thousand units in a capsule placed in the uterus has been reported to be of value in inhibiting the putrefac-

tive processes and reducing the possibility of complicating infections caused by susceptible organisms in cases of retained placenta in cows. Direct injection of penicillin into the unopened pus pockets of fistulous withers and the drained tissue abscesses of actinomycosis has been recommended. While it does not penetrate readily to the eye after parenteral injection, penicillin has been reported to be valuable in the form of ophthalmic ointments and solutions for acute conjunctivitis and septic inflammations of the outer eye caused by sensitive organisms. Sterile dressings, saturated with a solution containing at least 1,000 units/cc., may be effective for the treatment of superficial infections of the skin caused by organisms susceptible to penicillin.

Recommendations for the use of penicillin in erysipelas of swine are unsupported by adequate scientific evidence even though the causative organism is sensitive in vitro and the successful treatment with penicillin of erysipeloid in human beings and swine erysipelas of turkeys has been reported. Conflicting opinions concerning the value of the drug for this disease in swine, based on experiments with the penicillin treatment of the disease in laboratory mice, have been expressed. Perhaps future work with the disease in swine will produce information sufficient to form a justifiable conclusion one way or the other.

Although viruses are not amenable to penicillin activity, the relative sensitivity of the usual secondary invaders associated with most virus-caused diseases indicates the use of the substance for the treatment of the secondary complications accompanying such conditions as canine distemper and equine influenza.

AVMA Usage.—From the paragraph on veterinary science in the Introduction of Webster's New International Dictionary, second edition, unabridged, 1948, page viii, we glean: "In the field of Veterinary Science, the publications of the U. S. Department of Agriculture are used as a general basis. In the use and spelling of terms, in this manual, reliance is placed on the usage of the American Veterinary Medical Association and the U. S. Livestock Sanitary Association. Both of these organizations represent advanced thought in the scientific and regulatory phases of veterinary work."

Aim to Rid Mexico of Foot-and-Mouth Disease by Spring of '51

To those who may have thought that the Mexican-United States eradication forces were marking time during the past few months, the following information datelined August 9 from Mexico City and released by the Joint Live Stock Committee* should be revealing:

The new program for the eradication of foot-and-mouth disease in Mexico is beginning to take shape and by October is expected to be in high gear. Progress has been slow but steady in revitalizing the campaign since the slaughter program was abandoned last November. Most of the manifold problems facing the joint Mexico-United States Commission for the eradication of the disease have been solved and a clear-cut program worked out to rid Mexico of its No. 1 enemy.

The new program set up under the direction of Señor Oscar Flores, Mexican undersecretary of agriculture, and Gen. Harry H. Johnson, assistant secretary of the United States Department of Agriculture, calls for complete eradication of foot-and-mouth disease in two and one-half years. Under this program, approximately 7,500,000 animals in the infected zone will be vaccinated twice, and if necessary, they will be vaccinated three or four times in some cases.

This means that if the campaign goes as planned, Mexico will be rid of foot-and-mouth disease by the spring of 1951.

USDA reports, in contrast, make no predictions as to when operations may be concluded, concentrating instead upon the technical and administrative aspects of the program, from both the United States and Mexican standpoints, and evaluating the day-to-day problems involved, of which there are many. For example, USDA said on August 9 that "Although the Mexican and United States appraisers place fair valuations upon animals to be slaughtered—usually somewhat above the market price—owners have been very slow in permitting

^{*}This article, as well as all previous Journal news reports on foot-and-mouth disease, was prepared from the best information available to the AVMA, but is not to be considered as an official AVMA view on the campaign below the border. Inasmuch as the Association does not have an official representative or correspondent on the Mexican scene, its editorial staff must rely on data supplied by spokesmen for the campaign. Sources consulted for the article herewith are USDA press releases and special reports by Mr. George Kirksey, Texas public relations man now employed by the Joint Live Stock Committee to furnish on-the-spot reports to the livestock interests which the committee represents.

slaughter. There also have been threats of violence to Commission personnel."

By late July, rainy weather had halted work on the barbed-wire fence being built along the northern quarantine line to give added protection against spread of the disease to the U.S. border. At that time, about 132 mi. of jungle terrain had been cleared and about 58 mi. of actual fencing completed. But the rains were a help as well as a detriment: fewer stray animals crossed the Rio Grande into the United States, according to the federal border patrol charged with apprehending unauthorized visitors, both man and animal. Drouth relief brought by the rains was a principal factor in curbing illegal entries, along with deeper water in the river that tended to keep animals from crossing.

On July 2, a DC-3 plane assigned to transport campaign personnel crashed on a mountainside in Mexico, resulting in the tragic death of all 16 persons aboard, including five United States employees of the disease project (no veterinarians).

On several occasions, rumors have been circulated that infected areas were springing up above the northern quarantine line (see map, Journal, (May, 1948): 333), but such rumors all have been proved false by official inspections. However, there have been a few small pockets of infection south of, and close to, that line. One such pocket, near Tamazunchale in the state of San Luis Potosi, was eradicated late in June by the slaughter and burial of 855 cattle and 410 small animals. Concurrently, a similar pocket north of the southeastern quarantine line necessitated the slaughter of nearly 4,000 cattle and 900 small animals.

The prevailing policy of slaughter-vaccination operations, as stated by Señor Oscar Flores, co-director of the campaign, is, "If the outbreak occurs in a clean zone, we slaughter and set up a quarantine around it; if it occurs in an infected zone, we vaccinate."

Progress made in developing the vaccination program is generally regarded as the most impressive feature of the campaign to date. It was no small problem to shift from an all-out slaughter program to a campaign centering on vaccination. The first hurdle was to get the vaccine. Mexico had none and had never produced any. Argentina, Holland, Switzerland, and

other countries contracted to supply vaccines, but they could not produce the full amount needed and, moreover, some of the batches proved ineffective against the Mexican strains of virus. Thus, it became apparent that Mexico would have to produce her own vaccine if the campaign were ever to get into high gear. The outcome: the joint Mexican-U. S. Commission now has established manufacturing facilities in Mexico for turning out 400,000 doses of vaccine a month. This output, combined with foreign purchases of 200,000 doses monthly, will provide 7,200,000 doses a year—or approximately enough for one vaccination of all animals (7½ million) in the infected zones. Seventeen Mexican and United States veterinarians, headed by Dr. Fernando Camargo, are employed in vaccine-producing laboratories in San Jacinto.

"Tests have proved our vaccine over 89 per cent effective," Dr. Camargo said, "and we are hopeful of exceeding even that." Following production, it takes forty to fifty days to make complete tests of the vaccine, he added.

Although there is still some resistance to slaughter, vaccination is meeting no such opposition, it is reported. In fact, in many cases people bring their animals voluntarily when they hear that the aftosa commission is vaccinating in their area.

USDA's program for purchasing canned meat in northern Mexico continues to provide an outlet for cattle now barred from entry into the United States. In the fiscal year ended June 30, 1948, Mexican canning plants utilized about 180,000 cattle to produce 40,000,000 lb. of meat products, most of which went to European relief.

Early Ether Anesthesia in Veterinary Medicine.—An editorial in the American Veterinary Journal, (Sept. 1858: 46-47) describes cesarean section in sows performed under ether anesthesia. "Unity by first intention" was obtained by the application of tincture of aloes and myrrh and collodion. The author was Dr. George H. Dadd, head of the Boston Veterinary Institute, America's first veterinary college.

U.S.A. Acreage.—The crop acreage of prewar U.S.A. was 341,605,000 acres, while the 1947 goal set by the USDA is 365,893,000 acres, which is over 10,000,000 acres more than for 1946.

SURGERY & OBSTETRICS

AND PROBLEMS OF BREEDING

Stainless Steel Wire Used in Femur Fracture

R. J. GARBUTT, D.V.M.

New York, New York

OUR experience with open reduction fracture work, using different kinds of wire, had never been too satisfactory. During the spring of 1947, a German Shepherd

Fig. 1—Fractured femur, middle third; patient 21/2 years old.

crossbreed, 2½ years old, was brought to the hospital with a middle third femur fracture. The owner was reluctant to spend even a reasonable amount for surgery and hospital expenses, but gave his consent to an operation when informed that the costs would be negligible.

After an examination, it was decided to

use stainless steel wire in an open reduction operation. The patient was anesthetized, using atropine, morphine, and nembutal. The hair over the entire thigh down to the hock was removed, using an Oster clipper with a No. 40 blade. The area was then washed well with antiseptic soap and water, dried, cleansed with ether, and painted with zephiran. A sterilized sheet was placed under the leg. An incision about 4 in. long was made through the skin and the few superficial blood vessels were clamped. The muscles were separated by blunt dissection down to the cavity which was formed by the destruction of the musculature due to the movements of the fractured femur segments. A small hole was drilled through the distal end of the upper fragment and a piece of stainless steel wire was run through the opening.



Fig. 2—X-ray taken about four months after operation.

Note bone block.

The wire, 18 gauge, was left about 6 in. long, so that the upper fragment could be pulled out of the way. The lower fragment was located and a small hole drilled through

healing process and the formation of the bone block.

Six weeks after the operation (fig. 3), the patient showed no impediment in loco-

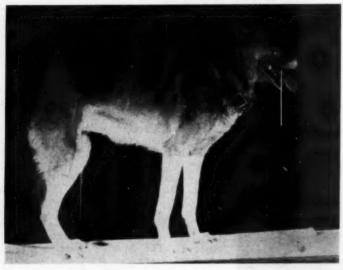


Fig. 3—The patient six weeks after open reduction and fixation of fragments with stainless steel wire.

its proximal end. The wire was then run through the hole, twisted, and cut off. A small quantity of sulfathiazole was sprinkled in the cavity. The muscles were closed using 0-catgut-chromic; the skin was closed using a mattress suture with dermalon 0. About 5 cc. of penicillin in sterile water was injected into the incised area. No bandage or cast was applied and no aftertreatment given. Figure 2 illustrates the

motion, walking, or running, and no swelling was evident. Fourteen months after the operation, the dog was brought before a prominent group of small animal practitioners who observed it carefully. Only a few were able to state which leg was involved and then only on palpation. This operation was performed in less than thirty minutes. It proved to be economical in time and material, and the end results were satisfactory.

Antiserum Defeats Its Purpose in Trichomoniasis Control

Banner Bill Morgan, University of Wisconsin, contends that mixing trichomoniasis antiserum with infected bull semen used in artificial insemination will not prevent the spread of Trichomonas infection. The antiserum is lethal to spermatozoa. The serum of pregnant cows agglutinates and kills spermatozoa in two to five minutes. Whereas, 17 pregnancies resulted in 20 control cows inseminated with untreated and uninfected semen, only 20 out of 101 normal cows inseminated with the mixture became pregnant and calved. The author (J. Anim.

Sci., May, 1948) concludes that until the spermatocidal action of bovine serums can be eliminated, the method has no place in artificial insemination.

Two Hundred Calves from One Cow.—
It is not beyond the range of possibility to stimulate a prodigious cow to "lay more eggs," to fertilize them with the semen of a prodigious bull, and to implant the fertilized ova into the uterus of scrub cows for incubation and thus get upward of 200 or more calves from a cow and a bull—From Minister of Agriculture News Letter, London, quoted by the Veterinary Journal.

The Pyrogens of Parenteral Therapy

Although studied in human medicine since 1865, the toxic agents—pyrogens which complicate parenteral therapy, notably the intravenous type, have seldom (if ever) been mentioned in veterinary literature except, now and again, in connection with the parenteral use of the heterogeneous products of serotherapy. The injection of antiserums derived from horses (a convenient source) kick up considerable trouble occasionally when injected into animals of another species. But, these casualties are trivial compared with the wicked reaction of blood transfusions in human medicine before bloods were typed for their compatability. The effects of injecting blood elements of one species into another, even in the form of small hypodermic injections, has long been known to be a dangerous practice. Chills, fever, convulsions, Chevne-Stokes dyspnoea, and death make up the characteristic tableau.

What is the nature of the toxic agent? "Protein shock" has no etiologic meaning. Bacterial and chemical ingredients of the injected material have been imputed without proof unto this day. And, how reconcile comparable reactions from nonprotein infusions (glucose, normal saline, calcium salts, et al.) which physicians now prevent by abolishing the use of rubber tubing in conveying liquids from bottle to vein? In our field, the dangers of pyrogenic substance per se in parenteral therapy has neither been determined nor spoken of. That the tubing and flask used for bulky infusions is condemned for future use in human medicine, unless vigorously decontaminated, is not stressed in the teachings of clinical veterinary medicine. though the toxic action of pyrogens has been measured by animal experimentation (rabbits, dogs, mice,) the manifestations of pyrogenic toxicosis in the mill run of the small and large animals of veterinary practice do not seem to be a part of current veterinary knowledge.

Besides discarding tubing once used for an intravenous or other parenteral injection, the precautions taken by manufacturers of ampoules testify to their importance. Makers of penicillin ampoules and the like do no less for the physician's security. Safe decontamination of glass tubing is achieved only by exposure to 250 F. for fifty minutes in the autoclave (U. S.

Disp., 24th Ed.). In clinical work (human), double distillation of aqueous vehicles and ordinary boiling of tube and flask do not eliminate the pyrogens. That rubber tubing, for example, is not rendered safe by prolonged boiling superimposed by a protocol of chemical cleansing is acknowledged.

The risk of passing pyrogens into the venous circulation is so great that attached plastic tubing is now furnished with each intravenous outfit as standard equipment with directions not to use the tubing again, whether the liquid infused was blood plasma, glucose, amino acids, salines, or what not

Whether pyrogenic substances so commonly impinged on glassware, tubing, and injected fluids are significant in the routine of veterinary practice, unrecognized, is the unanswered question. Collapse following venoclysis in animal patients is not rare.

The Hammond Method of Castrating Lambs—Elastration

Under the title, "Elastration," a new method of castrating lambs was described briefly in the April, 1947, issue of the JOURNAL, with a request for further comments. Except for the advertisements in the California Wool Grower of the applicator and rubber bands used for the operations, no additional knowledge of the subject was noted until Howard Snyder (Sheep Breeder, Nov., 1947) wrote a manifesto reporting that more than 2 million lambs in New Zealand and still more millions in Australia have been castrated by this method, and that the operation has been tried on the sheep of the Mississippi Agricultural Experiment Station and by some county farm advisers in California.

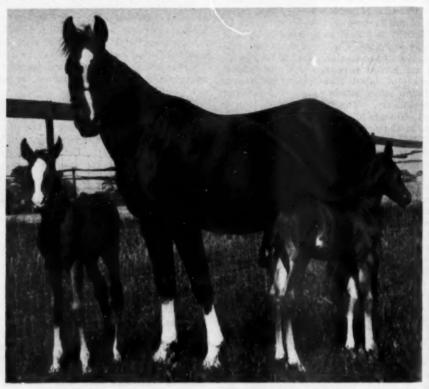
To repeat, a plier-like applicator (elastrator) slips a specially designed rubber band over the neck of the scrotum taut enough to cause a through and through pressure necrosis. The scrotum and its testicular contents dry up in five days and slough off in about twenty days. But for pain lasting three-quarters of an hour, there are no complications. The same apparatus is used for docking. Hemorrhage, fly-blown wounds, septic complications, and tetanus are entirely averted.

Arabian Twin Fillies

Pareta, Arabian mare, with her twin fillies, Mareta and Maretta, were foaled April 25, 1948, on the farm of Dr. and Mrs. C. D. Pettigrew, of Muncie, Ind. The flashily marked mare and her foals are blue bloods of the Arabian horse world.

Two crosses of the Champion Abu Zeyd (Lal-I-Abdar) imported, by the Champion Mesauod, are found in the mare's breeding. Also there are three crosses of Wadduda, desert bred by the Faddau Anazeh tribe of Bedouins, said to be the most famous war mare of all Arabia.

On the sire's side are four crosses of the



Pareta, Arabian mare, with her twin fillies, Mareta and Maretta.

Sire of the fillies is Ybarra AHC 1096. The dam, Pareta AHC 1020, is by Ch. Berk, imported, a horse of unusually perfect conformation. Both the sire and dam are among the 30 fine Arabians on the Pettigrew farm. Of pure and royal lineage, Mareta's and Maretta's ancestors can be traced back farther than any royal human dynasty.

Since twins of like sex are rare in the equine species, it is interesting to note that a full sister of Mareta and Maretta foaled twin stud colts three years ago. Only one survived.

celebrated Hamrah, imported, son of the distinguished mare, bred by the Anazeh tribe, the most powerful of all the Bedouins.

Both the above fillies are in perfect condition.—H. Meade Hamilton, D.V.M., Muncie, Ind.

Nylon for Deep Suture.—C. Frost, M.R.C.V.S., reports (Vet. Rec., 60, Mar. 12, 1948) satisfactory use of No. 3 nylon as the only buried suture material in a total of 205 ovariohysterectomies in bitches and cats. Sterilization of the nylon was accomplished by boiling for twenty minutes.

CLINICAL DATA

Verminous Aneurysm of the Anterior Mesenteric Artery in a Filly

ROBERT W. DAVIS, D.V.M., and GLENWOOD P. EPLING, D.V.M.

Fort Collins, Colorado

VERMINOUS aneurysms occur with equal frequency in horses, asses, and mules, and were observed by Ruysch¹ as early as 1665. These aneurysms are common in mature and aged animals, but are also encountered in animals as young as 6 months of age. Poeppel² found one in a colt 10 days old.

Aneurysms due to Strongylus vulgaris infection have been found in a wide range of arteries, including the aorta, coeliac, mesenteric, renal, carotid, and coronary, the most common location being the right branch of the anterior mesenteric artery. They are usually the size of a walnut, but this may vary considerably. Murray³ reports observing an aneurysm the size of a goose egg. Hutyra, Marek, and Manninger⁴ state they may reach the size of a man's head.

After S. vulgaris has entered the host, the larvae penetrate the walls of the intestines and migrate throughout the body. Some may reach the liver and the lungs via the blood stream, while others are almost invariably found in the wall of the anterior mesenteric artery, where they give rise to the formation of an aneurysm and the deposition of a thrombus on the altered intima of the vessel. The normal routes of migration through the body are not definitely known. It may be said that there are two schools of thought. Some believe that development in the aneurysm is a stage in the normal course and that the larvae are later transported back to the intestinal wall by the blood stream after they have escaped from the aneurysm into the lumen of the artery.5 Others, led by Olt,6 agree that some larvae develop in this

way, but maintain that they have gone astray and the normal route of migration is via the blood stream through the lungs, as in the case of Ascaris lumbricoides. Olt and others conclude that the larvae normally leave the intestines in the blood stream, thus reaching the lungs, but that



Fig. 1—Aneurysm of anterior mesenteric artery, (1) Fibrous wall of aneurysm; (2) Vena cava; (3) Colic vein; (4) Loop of ileum; (5) Arrow pointing to lumen of aneurysm.

some pass through the intestinal wall and wander up along the mesentery until their path is blocked by the large blood vessels. They then either pass into the portal circulation and follow the normal path or penetrate into the anterior mesenteric artery. Since the artery has a thick, firm wall, progress is slow and as the larvae continue to grow, they cause an inflammation which results in the formation of the aneurysm and thrombus.⁵

Gross indications of infestation are mani-

The writers acknowledge the advice of R. F. Bourne, head of the department of Physiology, and Wendell H. Krull, head of the Department of Zoölogy and Parasitology, Colorado A. & M. College, in connection with the case here reported.

fested only when the development of mesenteric aneurysm has progressed to the extent that intestinal circulatory disturbances have been established, including more or less complete blockage. The absence of arterial blood and the increase in its carbon-dioxide content acts as a stimulus to peristalsis. Contractions may

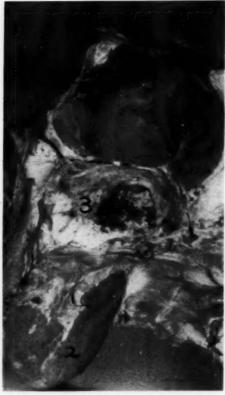


Fig. 2—The aneurysm encroaching upon the hilus of the left kidney. (1) Left kidney; (2) Right kidney; (3) Aneurysmal wall; (4) Lumen of aneurysm.

become violent, leading to abdominal pain, flatulence, purgation, and intussusception. Heavily infected young animals fail to develop in proportion to the feed consumed. This is especially true in the case of the light breeds.⁷

In cases where the iliac arteries become obliterated, intermittent lameness and posterior paralysis may result.

Strongylus edentatus, in contrast to S. vulgaris, has not been considered as a

causative agent in verminous aneurysms. S. edentatus larvae, after ingestion by the host, penetrate the walls of the intestines, especially of the cecum and colon, and reach the subperitoneal connective tissues of the abdominal walls. Here they remain for about three months, meanwhile increasing considerably in size. At the end of this stage of their development, the larvae migrate toward the root of the mesentery. moving between the two layers of this structure and thus reach the wall of the intestine into which they enter. In this way, the young worms become lodged in large hemorrhagic nodules which eventually open into the lumen of the intestine releasing larvae, which then complete their development.5

STRONGYLUS ANEURYSM IN A FILLY

This case of Strongylus-produced aneurysm was found in a Palomino filly of quarter horse breeding, foaled in May, 1945, on a ranch in the vicinity of Fort Collins, Colo. The foal was at the side of her dam on pasture until October, when she was

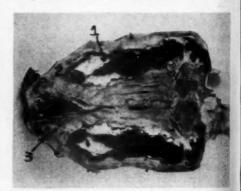


Fig. 3—Aneurysm of ventral colic artery. (1) Lumen containing debris and clot of blood; (2) Aneurysmal wall; (3) Cross section of incoming artery showing normal size.

weaned. She was exhibited in the foal class at the Colorado State Fair during August and at that time was in fine condition. In December, the owner noted that the filly was less active and spent much of her time lying down. She became progressively thinner, although her appetite remained good. A lameness developed in one hind leg concomitant with a swelling extending from the fetlock to the coronary band. The animal was admitted to the

Veterinary Hospital at Colorado A. & M. College Jan. 5, 1946. At the time of admission, the filly's temperature was 100.8 F., pulse and respiration were normal, and the general condition was fair.



Fig. 4—Blockage of ventral colic artery. (1) Ventral colic artery; (2) Wall of vessel removed, showing mass of disintegrating strongyles.

An examination led to no positive diagnosis. However, the owner was advised to apply heat to the swollen area and to-limit the animal's exercise. The leg seemingly responded to this treatment but a similar swelling soon appeared in the opposite limb.

The filly was pastured on green clover



Fig. 5—Entire great colon, with aneurysm in place.

[1] Lumen of aneurysm; (2) Heavy fibrous wall of aneurysm; (3) Yena cave; (4) Base of cecum; (5) Apex of cecum; (6) Left ventral colon; (7) Pelvic flexure; (8) Left dorsal colon; (9) Diaphragmatic flexure; (10) Right dorsal colon; (11) Floating colon.

for the summer of 1946 and returned to the stables in the fall showing no improvement. By late December the animal was very thin, was lame in both hind legs, and the swellings from the fetlocks to the coronary bands were still present. The filly, reluctant to walk, remained prostrate most of the time and was obtained by the Department of Anatomy in January, 1947, for dissection and study.

In the course of dissection by students, a large fibrous mass was found, which proved to be a verminous aneurysm of the anterior mesenteric artery. This aneurysm



Fig. 6—Jejunum. (1, 2) Cut sections of the jejunum showing Ascaris equorum in the lumen.

(fig. 1) measured 14 cm. anteroposteriorly, 12.5 cm. transversely, 17.5 cm. dorsoventrally, with a circumference of approximately 42.5 cm. The thickness of the arterial wall was 7 cm. The aneurysm encroached upon the hilus of the left kidney (fig. 2). In the center of the fibrous mass was the large, nearly spherical lumen of the artery. The lumen was largely filled

with white cheeselike debris. In the wall of the vessel were numerous unidentifiable immature strongyles. Only one was identified as S. vulgaris.

Dissection of the mesenteric vessels revealed enormously enlarged cecal and colic veins having lumens in many places com-



Fig. 7—Hemorrhagic Nodules in wall of large colon, showing Strongylus edentatus emerging into the lumen of the gut.

parable with that of the posterior vena cava. In addition, the lumbar and iliac veins were greatly dilated because of the aneurysmal pressure on the vena cava. The ventral colic or direct colic artery had, on its course, an aneurysm 24 cm. by 10 cm. (fig. 3). This aneurysm contained a white caseated material, considered to be debris resulting from the disintegration of parasites, and a postmortem clot of blood. A complete blockage of the ventral colic artery was found further along the vessel's course, which contained a number of disintegrating strongyles (fig. 4).

Figure 5 shows the entire intestinal mass and the relative size and position of the

There were a few Gasterophilus intestinalis (bots) in the pyloric region of the stomach. In the duodenum, smaller parasites (Triodontophorus) were found close to the pylorus as well as innumerable ascarids, which were mostly small immature forms. The jejunum was completely

filled with Ascaris equorum, including both adult and immature forms (fig. 6). There were no parasites in the ileum.

The cecum and large or double colon were found to contain literally thousands of S. edentatus, and massive numbers of the small strongyles (Triodontophorus) about which little is known. shows hemorrhagic nodules in the large colon through which S. edentatus are emerging.

Because of the rapidity and the extent to which aneurysms develop and because such aneurysms may do irreparable damage, an early, accurate diagnosis is im-

portant.

The fact that the large intestines contained thousands of adult S. edentatus and no identifiable S. vulgaris, whereas the lumens of the vessels contained numerous unidentifiable immature strongyles, only one of which was positively identified as S. vulgaris, might point to the possibility of S. edentatus as well as S. vulgaris being a causative agent in the incidence of verminous aneurysms of equines. Additional studies should be made of the cycles and migration routes of these parasites.

References

¹Winchester, F. F.: Strongylus Armatus. Vet. Rev., 16, (1892): 359-398.

Railliet, A.: Verminous Aneurism of Horses. Vet.

Med., 18, (1923): 1013, 1071.

Murray, S.: Parasitic Aneurysm of the Coeliac Axis. Canad. J. Comp. Med., 4, (1940): 117-118. Hutyra, F., Marek, J., and Manninger, R.: Pathology and Therapeutics of the Diseases of

Pathology and Therapeutics of the Diseases of Domestic Animals, 2, (1938): 680-681.

^aMonnig, H. O.: Veterinary Helminthology and Entomology, (1941):158-60.

^aOlt: Deut. Tier. Wschr., 4θ, (1932):326-332.

^aGilyard, R. T.: The Common Palisade Worm; Strongylus Vulgaris. Vet. Med., 3θ, (1935):254-255.

Foot-and-Mouth Disease Vaccination in Swine.-In a recent communication presented to L'Academie Vétérinaaire de France, Berin takes exception to previous reports to the effect that vaccinating swine against foot-and-mouth disease fails to confer protective immunity, contending from ten years of personal observation and published reports cited that polyvalent vaccine in swine gives a protection equivalent to that of cattle.

Improved Rabies Vaccine in the Offing.-A method of extracting nonessential fats from crude rabies vaccine by ultraviolet irradiation (Science, July 20, 1948) and chemicals promises to yield a more reliable antigen.

Differential Diagnosis and Specific Therapy of Dysenteries in Dogs

JOHN E. CRAIGE, V.M.D.

Seaside, California

DIARRHEA and dysentery are among the most common conditions presented to the small animal practitioner. They account for a large proportion of the primary diseases among dogs and frequently complicate generalized infections such as distemper and leptospirosis. These conditions create difficult sanitary situations in kennels and small animal hospitals. In spite of their importance, surprisingly little attention has been given to them, and practically no extensive etiologic studies have been reported. The treatment of dysentery is apparently no better understood than its etiology; a large number of drugs and combinations of drugs are recommended but none seems to be effective in every case.

Interest in the organisms associated with dysentery in dogs was stimulated when Salmonella anatum was isolated from the feces of a dog with diarrhea and nervous symptoms.1 Fecal cultures on other dogs with dysentery indicated the importance of the Proteus group, but a large percentage of cases were still unexplained. Additional study disclosed the probable pathogenicity of intestinal spirochetes and Giardia; and, of course, coccidia were found to account for some of the cases. Proteus2 and intestinal spirochetes3 have been discussed in detail in separate reports; this paper will deal with Salmonella, Giardia, and coccidia, and summarize the incidence, differential diagnosis, and recommended treatment for dysenteries associated with all of the organisms.

SALMONELLA

Wolff⁴ has given an up-to-date report of the incidence and significance of this group and a comprehensive review of the literature. They have been recovered from dogs on many occasions within the past few years; and, in several cases, there has been evidence that human beings have become infected from dogs. Wolff found Salmonella organisms in 18 of 100 dogs cultured. Since these organisms are of such great public health importance, this incidence

is alarming. I have found Salmonella organisms in only 2 dogs from about 200 rectal cultures (unpublished data). The difference in findings may be due to differences in environment; my series was composed of either healthy war dogs or privately owned dogs from fairly well-to-do families. Wolff does not state the source of the dogs in his study, but it is probable that the incidence of enteric organisms such as Salmonella would be greater among dogs coming into a city pound than among dogs that had led a more sheltered existence.

The reports of Salmonella infection in dogs show that generalized infections or central nervous system involvement usually accompany the dysentery, which may seem secondary.

There is not sufficient evidence on which to base a recommendation for the treatment of Salmonella infections. The 2 cases of S. anatum infection previously reported responded to sulfaguanidine. Streptomycin inhibits some strains, in vitro, and will probably be helpful in some cases, but other strains are not affected by this antibiotic agent. Bacterins have proved valuable in the prevention and treatment of Salmonella infections in man. Autogenous bacterins may be prepared for use in dogs and should be employed where chemotherapeutic and antibiotic agents prove ineffective, especially to prevent the spread of the infection through kennels. The complicated antigenic structure of the organisms in this group makes the use of stock bacterins impractical.

Salmonella organisms are highly pathogenic for human beings. Since dogs are known to harbor these organisms and since there is frequently an intimate contact between dogs and people, especially children, it is imperative that we devise means to diagnose these infections in dogs and to isolate and treat dogs until they are no longer infectious. A simple method for making fecal cultures will be outlined below, but all suspicious

organisms should be identified by a qualified laboratory.

GIARDIA

It has long been known that Giardia organisms are present in the intestinal tract of dogs and other animals, as well as

TABLE I—Intestinal Organisms in 160 Fecal Examinations

		ations	•		
	Spirochetes	Proteus	Giardia	Coccidia	No organism
Dysentery No	.38	35	14	11	7
dysentery	25	0	0	0	57

man, ^{5, 6,} and that they probably cause diarrhea. Recently, Catcott⁷ has found Giardia in 20 dogs from 100 tested; 7 of the group had diarrhea. There has been a tendency to classify the organisms found in dogs as *Giardia canis*, but there does not seem to be sufficient evidence for a differentiation from the human pathogen G. lamblia. Faust⁸ has found that G. lamblia is readily

infection with other intestinal pathogens. In the uncomplicated cases, the symptoms were comparatively mild in mature animals, although 1 dog had a history of chronic dysentery for at least four months and another an intermittent diarrhea for four years. More severe symptoms were noted in young puppies. Infection with Giardia was the only apparent cause of severe dysentery in several young puppies from kennels reporting high fatalities from dysentery among puppies.

Recently, atabrine has been employed with marked success in the treatment of Giardia infections in human beings. The results have demonstrated conclusively that these organisms are mildly pathogenic. Atabrine has been used in all the dogs in this series with excellent results in every case.

Case Report.—The first dog in which Giardia were discovered was a 5-year-old male Cocker Spaniel that had a history of chronic dysentery for at least four months, possibly longer, when first seen. Rectal culture failed to reveal any enteric pathogen, and treatment with sulfaguanidine and bismuth preparation had only a fleeting effect

TABLE 2-Intestinal Organisms in 71 Cases of Dysentery

	Alone	Complicated	Total
Spirochetes	18	Pr-6 G-6 C-3 Pr and G-3 G and C-2	38
Proteus	25	S-6 G-1 S and G-3	35
Giardia	1	S-6 Pr-1 C-1 S and pr-3 S and C-2	14
Coccidia	5	S-3 G-1 S and G-2	11

S=Borrelia spirochete; Pr=Proteus group; G=Giardia sp.; C=Coccidia.

transmitted to dogs. From a public health point of view, it is important to clarify this point since the incidence of these organisms in dogs is probably greater than has been suspected.

Giardia are identified on the fecal slide under high dry power by their peculiar structure and motility.⁸ A drop of Lugol's solution added to the preparation will stop the motility and stain the internal structure and flagella for study. The cyst form is nonmotile and is more frequently seen. These forms resemble small cocidia cysts. Care must be used to differentiate them from encysted artifacts; and again iodine helps by staining the internal structure.

Giardia have been found in a total of 24 dogs. All had some degree of dysentery, but 15 of the cases were complicated by

on the disease. Giardia were discovered in large numbers in the feces by the personnel of the Ninth Service Command Medical Laboratory, Presidio of Monterey, Calif., after three weeks of unsuccessful treatment. The dog was given one 100-mg. tablet of atabrine twice daily for three days and again, after waiting a week, for three more days. After the second course of treatment the dog became normal. Giardia could not be found in the feces subsequently.

Coccidiosis

The pathogenicity of coccidia has been established by several parasitologists.⁷ It does not seem necessary to discuss here more than the treatment and the incidence of this disease.

Treatment has been less effective for

coccidiosis than any of the other pathogens found. Detailed records have not been kept on all cases, but the results can be summarized as follows: sulfaguanidine alone gave unsatisfactory results even when given in dosage greater than recommended; atabrine was tried when it was found specific for Giardia, but only about half the cases responded to this treatment; the most effective treatment (about 75% cures) has been a combination of sulfathalidine (1 gr./lb. body weight per day), atabrine (100 to 400 mg. daily), iodochlorhydroxyquinoline (250 to 500 mg. daily), and sulfacarbolates compound (4.5 to 9 gr. daily), where the latter did not induce vomition. There have been no indications of incompatability with these drugs.

It is hoped that the research being conducted on coccidiosis in poultry will develop a more satisfactory treatment for this disease in dogs.

COMPARATIVE INCIDENCE

Fecal examinations were made on a series of 160 dogs selected at random over a four-month period to determine the prevalence of the intestinal organisms discussed herein. About 25 per cent of the dogs were apparently healthy; the remainder were suffering from some infectious disease, usually dysentery. Table 1 shows the incidence of the various organisms and whether or not dysentery was present. Each of the organisms, except Salmonella, accounts for a fairly large percentage of the intestinal infections in this area at this time.

Two or more of these organisms were found in 22 cases. The combinations are shown in table 2. In general, the dysentery was more severe in the cases with mixed infections, and treatment was not successful until each organism was treated specifically.

DIFFERENTIAL DIAGNOSIS

Most of the enteric pathogens discussed in this report can be identified for practical purposes by using a few very simple procedures which should be employed routinely. So many cases have been found with mixed infections that it is necessary to make all of these tests on every case to establish an accurate diagnosis.

A) Direct Examination.-A small amount of fresh feces, preferably from a thermometer, is mixed with a drop of sterile distilled water on a clean slide and covered with a clean cover slip. The slide is scanned under low power for parasite ova and coccidia, as well as undigested particles of food. It is then studied carefully under high dry power (4 mm. objective) reducing the light so that the bacteria can be seen clearly. Spirochetes are easily identified by their characteristic morphology and motility.3 Both the motile form and the cysts of Giardia can also be recognized. In some slides, it is even possible to identify what are probably Proteus organisms by their amazingly rapid motility.

B) Concentration.—A flotation test should be made on all fecal specimens to determine the presence of parasite ova, coccidia, and Giardia in less heavily infected cases. Since the

TABLE 3-Diagnosis and Treatment of Dysenteries in Dogs

Oganism	Identification	Treatment
Proteus (gram-neg. bacteria)	Rectal culture SS agar (Difco). White colonies identified by urea splitting test.	Streptomycin administered orally specific for acute cases. Autogenous bacterins used with streptomycin in chronic cases.
Borrelia sp. (spirochete)	Direct microscopic examination. 4 mm. objective, light or dark field. Identified by characteristic morphology and motility.	Intestinal sulfa drugs satisfac- tory in mild cases. More serious cases should be treated with strep- tomycin and penicillin.
Giardia sp. (protozoan)	Direct microscopic examination, 4 mm. objective, light field. Tro- phozoites and cysts by character- istic morphology. Cysts concen- trated by flotation.	Atabrine given orally for three days, usually specific. May be necessary to repeat.
Coccidia (protozoan)	Occysts seen in direct microscopic examination and concentration.	Oral administration of intestinal sulfa drugs combined with atabrine, iodochlorhydroxyquinoline and sulfacarbolates.
Salmonella (gram-neg. bacteria)	Rectal cultures SS agar (Difco). White colonies identified blochemically and antigenically,	Intestinal sulfas helpful in some cases, streptomycin orally helpful in some cases. Autogenous bac- terins?

concentration of both Giardia and coccidia fluctuate in the feces, it is advisable to repeat this test in cases that do not respond to specific treatment for other pathogens.

C) Culture.-For the enteric group bacteria (Salmonella, Shigella, Proteus), a sterile swab should be inserted into the rectum and cultured on a plate of SS agar (Difco). The enteric organisms develop white colonies after twelve to twenty-four hours' incubation at 37 C. The larger colonies of most of the Proteus strains develop metallic black centers; whereas, these are rarely found in other enteric organisms. A more complete differentiation of the Proteus group can be obtained by culture on blood or nutrient agar plates for swarming, and by the urea splitting test.2 All organisms that are not in the Proteus group should be sent to a laboratory qualified to identify Salmonella and Shigella organisms.

TREATMENT

By employing the tests described above, it has been possible to diagnose about 90 per cent of the cases of dysentery and to make accurate prognoses regarding length of treatment, expense, and ultimate results. Treatment for spirochetal dysentery depends on age and severity. Milder cases are usually cured after three or four days of oral administration of sulfa drugs. young puppies and more severe cases, the prognosis must be guarded. Sulfa drugs and streptomycin are given orally and penicillin parenterally for three or four days. It is usually necessary to repeat the treatment two or three times before permanent cures are attained.

Most of the acute Proteus infections respond spectacularly to the oral administration of streptomycin;² the more chronic cases are helped by streptomycin, but autogenous bacterins are frequently necessary for permanent results. Atabrine is specific for Giardia infections, and coccidiosis is treated with a combination of atabrine, sulfa drugs, iodochlorhydroxyquinoline, and sulfacarbolates where tolerated.

DISCUSSION

The organisms discussed herein are probably not the only causes of dysentery in dogs. It is generally considered that the virus of distemper and possibly other viruses can cause enteritis. Furthermore, several other organisms recognized in this study gave evidence of pathogenicity. A Treponema spirochete was found in large numbers in the stomachs of several dogs dying with an acute gastritis and another

cordlike spirochete was observed in several fecal specimens. Two unidentified protozoa were seen, possibly commensals, and a few cases were observed with large concentrations of streptococci in the feces. Further study will probably disclose the significance of these and other organisms.

This study has indicated that diarrhea is not necessarily a predominant symptom of infection with enteric organisms. many cases, the owners do not realize that the bowel movements are abnormal, although they may actually be soft or may show evidence of poor digestion of food. Infected animals often have a variety of obscure symptoms such as unthriftiness, poor coat, loss of weight, nervous involvement including fits, or abdominal pain. Autopsy of several cases known to harbor spirochetes or Proteus has shown inflammation of the mucosa in a small section of the jejunum, but the rest of the intestinal tract has been apparently normal. Other cases with obscure symptoms have responded to specific treatment for the intestinal pathogen discovered. The severity of the dysentery varies with the age of the dog in all of these infections. This has been discussed in some detail in reporting the findings with the Proteus group2 and spirochetes3 and has also been found true in coccidial and Giardial infections. The disease is much more acute and fatal in young puppies, whereas the symptoms become less severe and more obscure as the animals become older.

Boarding kennels and breeders seem to be especially plagued with intestinal infections. Often diarrhea breaks out, especially among puppies, when there is no known contact with sick animals. This has been found to be due in most cases to the presence of healthy carriers or chronically infected dogs. When such an outbreak occurs in a breeding kennel, all the dogs should be tested and any with intestinal pathogens isolated and treated until cured. In large breeding kennels where the cost of such a program would be prohibitive, every parturient bitch should be tested about two weeks before whelping, treated if positive, and kept isolated until the puppies are weaned. Such an examination is also not practical for every dog coming into a boarding kennel. In these establishments, it is necessary to practice strict segregation and careful sterilization to protect the susceptible dogs.

A better understanding of intestinal disease in dogs is important from a public health viewpoint. Salmonella are probably the most significant pathogens, but there is also evidence that Proteus and Giardia and possibly spirochetal infections and coccidiosis might be transferred from dogs to man.

SUMMARY

A clinical study of the etiology of dysentery in dogs has been attempted. Bacteria in the Salmonella and Proteus groups, a spirochete (probably Borrelia eurygyrata), Giardia sp., coccidia, and combinations of two or more of these organisms all seemed to account for a significant percentage of the cases. A practical method for differential diagnosis based on direct examination, flotation, and rectal cultures is outlined, as is specific therapy for each of the organisms except Salmonella.

Craige, John E.: The Isolation of Salmonella Anatum from the Feces of a Dog. J.A.V.M.A., 105, (1944): 33-34.

*Craige, John E.: Proteus Group Organisms Infecting Dogs. J.A.V.M.A., 113, (Aug., 1948): 154-

*Craige, John E.: Spirochete Associated with Dysentery in Dogs. J.A.V.M.A., 113, (Sept., 1948): *Wolff, Arthur H.: The Public Health Significance of Animal Salmonella Infections. J.A.V.M.A., 111, 1947): 474-479.

^aHutyra, Franz, Marek, Joseph, and Manninger, Rudolf: Special Pathology and Therapeutics of the

Diseases of Domestic Animals. 4th Eng. ed., Alexander Eger, Chicago, Ill., 2, (1938): 361.

"Strong, Richard P.: Stitt's Diagnosis, Prevention, and Treatment of Tropical Diseases. The Blaklston Company Philadelphia, Pa., 7th ed. (1944): 465-470.

Catcott, Earl J.: The Incidence of Intestinal Protozoa in Dogs. J.A.V.M.A., 108, (1946): 34-36.

Craig, Charles Franklin, and Faust, Ernest Carroll: Clinical Parasitology. Lea and Febiger. 2nd ed. (1940): 111-118

ed. (1940): 111-116.

Morrison, Lester M., and Swalm, William A.: A New Effective Parasiticide in Giardiasis. Am. J. of Digest. Dis., 6, (1939): 325-327.

Why do Cows Bloat?-Espe, Jacobson, and Cannon, of Iowa State College (Aurshire Digest, May 15, 1948), take the common sense view of this question, with which few veterinarian will disagree, i.e., that cows bloat because they eat too much, too fast. In the absence of a preëxisting organic default, it would be hard to find a better answer.

Inclusion of 7 oz. of bone meal in the daily ration per steer reduced the incidence of urinary calculi in tests made at Texas A. & M. College.-Nat'l Live Stock Prod., July-Aug., 1948.

Traumatic Removal of Epiglottis and Uvula

On June 14, 1948, a 3-year old Doberman Pinscher female was presented to this clinic with profuse hemorrhage from the mouth and nose. Examination showed complete removal of the uvula, a semicircular piece of soft palate about 11/2 in. in diameter was gone, and the projecting tip of epiglottis severed.

The owner advised that the dog had been running with a stick in her mouth, which became lodged in her throat and was dislodged by violent shaking of the head, thus tearing out the aforementioned parts.

Prognosis was declared unfavorable in the belief that deglutition could not be properly performed without the epiglottis, and that foreign body pneumonia would likely occur.

Treatment consisted of an initial 300,-000 units of penicillin in wax, vitamin B complex injected every other day, and 250 cc. of 5 per cent dextrose-saline with 100 cc. of 15 per cent parenamine (Winthrop-Stearns) intravenously, twice daily. food or water was given per os.

At the end of nine days, the throat had apparently regained its ability to close the trachea during deglutition, and the animal was able to take nourishment normally.

The dog weighed 67 lb. on entering the hospital and 59 lb. on release, a loss in weight of slightly less than 1 lb. per day while amino acids were being administered. -W. C. Young, D.V.M., 14520 Plymouth Road, Detroit, Mich.

Keratins in Poultry Nutrition.-Keratins, though deficient in at least four amino acids (tryptophane, methionine, lysine, and histidine), offer promise as a "conservation" protein feed in poultry rations. Some keratins, such as powdered hog hair and powdered chicken feathers, seem to produce certain undesirable effects, but powdered hog hoofs, properly processed and supplemented with the amino acids they lack, have a promising application.

Hog Bristles Injurious to Chickens .-- A flock of growing fryers that had access to fresh hair of butchered hogs were found to have suffered from unthriftiness due to punctures of the crop and gizzard by the bristles. "Others," says a letter to Successful Farming "have reported the same experience."

The Use of Sulfamethazine in the Treatment of Foot Rot, Metritis, and Calf Pneumonia

JOHN D. CASE, D.V.M.

Clinton, New Jersey

FOLLOWING the discovery and development of sulfanilamide, various other sulfonamides have been used in veterinary practice during the past five years, especially during the postwar years. Certain bacterial diseases of domestic animals respond to some of these compounds. However, the search for new and better agents has continued, and thousands of sulfonamides have been synthesized and screened. These new sulfonamides are tested to determine toxicity, antibacterial range, specific application, and economical use in the field. Sulfamethazine, the dimethyl derivative of sulfadiazine, is apparently one of the least toxic of the sulfonamides, active against many gram-negative and gram-postive organisms, and the most persistent in the blood on administration once daily.1-5 The present paper is a report on the field use of sulfamethazine in foot rot and metritis of cattle. and calf pneumonia.

The succesful use of various sulfonamides in these conditions has been reported frequently. Excellent results were reported in the treatment of foot rot by Forman and his associates6, 7 following the use of sulfapyridine, and by McAuliff and Phillips8 and Candlin9 with sulfamerazine, administering 2 to 3 gr./lb. of body weight in a single intravenous injection, in early cases. Recovery was usually complete within three to five days. In advanced cases, two treatments usually resulted in gradual improvement and considerably slower recovery, and a few cases showed no response to treatment. Thorp and Straley,2 in their paper on the use of sulfamethazine, reported recoveries in early cases on one treatment, at a dosage of 1 gr./lb., administered intravenously or orally.

Sulfamerazine was used in 9 cases of metritis, by Wastrack and Lewis. O Six complicated cases were treated orally for one to three days. In 3 cows, showing no signs of septicemia, the powdered drug was applied to the endometrium. All cows improved rapidly and made uneventful recoveries. Encouraging results were reported

by Bryan¹¹ and Thorp² in the sulfonamide treatment of metritis, but the numbers of animals treated were too small to be significant.

Thorp¹² used sulfathiazole, sulfadiazine, and sulfamerazine in the treatment of calf pneumonia with generally favorable results when the drugs were administered early in the disease. Sulfamerazine required less frequent oral doses than other sulfonamides used in this work.

Jones¹³ used sulfathiazole, sulfapyridine, and sulfadiazine in the treatment of clinical cases of calf pneumonia, and found that sulfathiazole treatment resulted in quicker recovery than the other drugs used. Usually, divided dosage, at twelve-hour intervals, was administered and duration of therapy averaged from 3.83 to 5.66 days. Mortality ranged from 16.0 per cent for sulfathiazole to 25.0 per cent for sulfapyridine, in comparison with 58.2 per cent in untreated controls.

Wastrack and Lewis¹⁰ and McAuliff¹⁴ reported the successful use of sulfamerazine in calf pneumonia. The drug was usually administered in divided doses, two to four times per day, for one to three days. Improvement was generally noted within twenty-four hours.

Langer and his associates15 have shown that, after parenteral administration of sulfamethazine, concentrations of the drug in the milk of slightly less than half the blood levels are attained. The free sulfonamide in plasma water apparently equalizes itself throughout the body and diffuses into the intracellular spaces by way of blood and lymph. We can assume that, if sulfamethazine is carried into and excreted by the cells of the udder in effective concentrations, it will also be found in adequate concentrations in other tissues of the body. It would appear, therefore, that in all parts where there is normal circulation, those parts would have the same free drug concentration as that found in plasma water. This may not be true, however, in consolidated areas of the lung, in cases of foot rot

with marked involvement, and in similar infections where there is impairment of circulation and the establishment of dense tissue barriers, and it may take a much longer time to attain adequate bacteriostatic concentrations. It seems logical, therefore, that if, experimentally, certain sulfonamides and antibiotic agents can be demonstrated in significant amounts in the milk of an animal, there is probably a like concentration of the drug in other tissues as well.

It is recognized that the evaluation of a sulfonamide in the treatment of these diseases is difficult even if large numbers of animals are treated. In conditions where, as the disease progresses, tissue barriers are built up with attendant impairment of the circulation to the part, the stage at which treatment is started will affect the results. Because of such a tissue barrier and impaired circulation, a sufficient concentration of the drug at the point of infection cannot be obtained rapidly with the usual dosage. It is probably desirable, therefore, in advanced cases of this type, to increase the usual dosage by 25 or possibly 50 per cent.

FOOT ROT

The present report covers sulfamethazine treatment of 40 cases of foot rot in several herds. Some of the farms were on low land, with black, mucky soil, and muddy barnyards, and foot rot was recurrent each year. In the late winter, slight lameness in the animals was noted, usually in hind feet which were frequently in the gutters in the barns. When the cows were put out on meadows in the spring, the pastures were wet and muddy, and severe lameness followed.

Thirty-six cases treated were of approximately five-days' duration, when marked swelling and pus and necrotic areas in the soft tissue between the claws were apparent. Routine treatment consisted of the intravenous administration of 250 cc. of sodium sulfamethazine 25 per cent w/v sterile solution—approximately 1 gr./lb. of body weight. No local treatment was administered and the cows were not confined in the barns. There were no toxic reactions in any of the animals so treated.

Within twenty-four hours, these early cases showed marked improvement; in forty-eight hours, the animals were walking fairly well; and in seventy-two hours,

all swelling had disappeared and complete recovery had apparently taken place. Two months following treatment, there had been no recurrences.

Of the 4 remaining cases, 2 were chronic with marked involvement. One of these cleared up with one treatment, but more slowly than the acute cases. As very little improvement was evident in the other, treatment was repeated in three days, and the animal then made an uneventful recovery.

The third animal had a hot and swollen foot with involvement of the distal phalangeal joint. On examination before treatment, this appeared to have progressed to the point where amputation was necessary. In the fourth case, there was a pocked and spongy heel with exudation at the margin of the horny tissue. While such cases are not unusual, they are not fully typical of foot rot. Sulfamethazine was administered to these two cows in the routine manner, but three injections at three-day intervals had no beneficial effects. Recent reports of other workers would indicate that the same treatment on three successive days might have been more effective in building up and maintaining a therapeutic level in the infected tissues, and better results might have followed.

For some time, sodium sulfapyridine and sodium sulfathiazole had been used routinely in the treatment of foot rot. Satisfactory results usually had been obtained with these treatments, but response was much slower than with sulfamethazine therapy. Cows treated with sulfamethazine have regularly been back in full milk production in one to two days, with no loss in weight and little loss in milk production, in comparison with two to four, or more, days when other treatments were used. Also, the elimination of time-consuming, inefficient local therapy, and less irritation and inconvenience to both the patient and the veterinarian, are definite advantages of this type of treatment.

Foot rot is a more serious condition than has been generally recognized. Animals having foot rot frequently carry a high temperature, and drop off in milk production and weight. If they are barn fed, they usually show inappetence and stand with reluctance. If they are on pasture, they graze no more than is necessary to maintain themselves. Cows with foot rot cannot usually be bred as they cannot main-

tain the weight of the bull, and there is a consequent loss in breeding efficiency. Bulls with sore feet will often refuse to breed.

In some dairies, the direct and indirect loss, where foot rot is prevalent, is a serious economic factor. Prior to the use of sulfonamides in the treatment of this condition, local applications were often ineffective, time consuming, and recoveries were slow and uncertain. When foot rot is treated early in its onset with sulfamethazine, there is usually a prompt recovery with little loss in weight, milk production, or other costs.

It is recognized that spontaneous recovery may occur in some cases of foot rot, especially blind fouls, if dry floors, good feed, and rest are provided. This will, of course, involve a long recuperative period. However, as it is not possible to determine in which animals spontaneous recovery will occur, it seems logical to treat all cases to assure rapid recovery and a higher percentage of recoveries.

METRITIS

Sulfamethazine was used in the treatment of 11 cases of metritis following parturition. Each cow had a history of retained placenta. All were showing the usual symptoms of toxicity, inappetence, depression, and dehydration. Temperatures were, at first, subnormal, followed by a slight rise up to 103 F. There was a heavy brownish red, foul smelling, purulent discharge.

Each cow received one intravenous injection of 250 cc. of sodium sulfamethazine, 25 per cent w/v sterile solution, approximately 1 gr./lb. of body weight. In all cases, there was marked improvement within twenty-four hours, and appetites had improved. Within one week, the tissues had been expelled, the uterus was returning to normal tone, and all cows appeared normal and were back in milk production. It would appear that sulfamethazine established a sufficiently high level in the mucosa of the uterus to inhibit or control infection.

CALF PNEUMONIA

Over a period of twelve months, approximately 20 clinical cases of calf pneumonia have been treated with sulfamethazine. These were a representative cross section of cases treated over several years on average farms in this vicinity. All diagnoses were made by history, clinical findings, and

general condition of the calf, and no bacteriologic examinations were made.

Typical of the results of sulfamethazine treatment are the two outbreaks given in detail. Six cases of clinical pneumonia in calves weighing approximately 100 lb. were diagnosed in one herd. The animals exhibited the usual symptoms of fever, depression, rapid labored breathing, coughing, and inappetence. Temperatures ranged from 103 to 106 F. Sodium sulfathiazole was administered parenterally at the rate of 1 to 2 gr./lb. of body weight, in divided doses, for three days. At the end of that time, temperatures were normal. ever, there was recurrence of symptoms after four or five days. Then sulfamethazine 2.5 Gm. oblets were used in treatment, at a dosage of approximately 2 gr./lb. Divided doses were administered at twelvehour intervals, for three days, to all but 1 which received a four-day treatment. Definite improvement was apparent within twenty-four hours. The animals were alert, appetites had improved, and temperatures were normal when examined three days The calves made uneventful recoveries and there was no recurrence.

In the second group, 3 Guernsey calves, 4, 6, and 7 weeks old, weighing 90, 110, and 120 lb., respectively, were maintained in one stall, Typical symptoms, as described above, were noted, and temperatures ranged from 104 to 106 F. Sodium sulfathiazole alone, and the combination of sodium sulfathiazole and sodium sulfapyridine, had been administered intraperitoneally at a dosage of 0.4 to 0.6 gr./lb. and daily improvement was noted. In three days, tem-peratures were normal. Three days after treatment was discontinued, temperatures were again high and symptoms apparent. Sulfamethazine 2.5 Gm. oblets were administered at approximately 2 gr./lb. in divided doses at eight-hour intervals, for three days. There was marked improvement each day and, at the end of the treatment period, temperatures were normal and there was no evidence of respiratory infection. There were no recurrences.

No toxic reactions were observed at the dosage used in any of the animals treated.

CONCLUSIONS

From the data published, it is evident that, in cattle, sulfamethazine produces a higher blood level that persists for a longer period than any of the other currently available sulfonamides at the same dosage level. In my own experience, in the treatment of cattle under farm conditions, this drug is more effective than sulfathiazole and sulfapyridine in foot rot, pneumonia, and metritis.

SUMMARY

Sulfamethazine has been used in the treatment of 40 cases of foot rot in cattle, 11 cases of metritis, and 20 cases of calf pneumonia, over a period of approximately

Complete recovery occurred within seventy-two hours in 36 of 40 cases of foot rot on one intravenous injection of sodium sulfamethazine at a dosage of 1 gr./lb. of body weight. In 2 advanced cases, recovery was less rapid, and in the 2 with extensive involvement, there was no effect. No local treatment was used.

With one intravenous injection of sodium sulfamethazine, at a dosage of 1 gr./lb., infection was overcome in 11 cases of metritis following parturition. Within one week, all cows were back in milk production.

Treatment of 9 cases of calf pneumonia are given in detail. Sulfamethazine oblets were administered at a dosage of 2 gr./lb. for three days to 8 calves, and for four days to 1. At the end of the treatment period, there were no signs of respiratory

There were no evidences of toxicity in any of the animals treated.

¹Welsh, M., Schroeder, C. R., Vroman, D. F., Reddin, L., Burkhart, R. L., and Langer, P.: The Fate of ½ gr./lb. Body Weight of 7 Sulfonamides in 7 Animal Species. Proc. U. S. Livestock Sanitary

of ½ gr./lb. Body Weight of 7 Sunformandes in a himal Species. Proc. U. S. Livestock Sanitary Assoc. 50th Ann. Meeting, (1946):213.

"Thorp, W. T. S., and Straley, E. J.: The Use of Sulfamethazine in the Control of Certain Infectious Diseases of Livestock. Proc. U. S. Livestock Sanitary Assoc. 50th Ann. Meeting, (1946):235.

"Harms, H. F., and Langer, P. H.: Control of December in Swife with Sulfamethazine, J.A.V.M.A.

Pneumonia in Swine with Sulfamethazine, J.A.V.M.A.,

111, (Sept., 1947): 205.

Fox. O. K., and Burkhart, R. L.: Hemorrhagic Septicemia in Swine Controlled with Sodium Sul-

Septicema in Swine Controlled with South Salaman Salamethazine. Vet. Med., 42, (Oct., 1947): 379.

Scheidy, S. F., and Tillson, E. K.: Concentration of Sulfadiazine, Sulfamerazine, and Sulfamethazine in the Blood of Cattle. Vet. Med., 42, (July, 1947):

Forman, C. R.: Single Injection Specific Treatment for Foot Rot in Cattle. J.A.V.M.A., 109, (Aug., 1946): 126.

Forman, C. R., Burch, J. E., Dee, C. E., Kelley, Mouw, J. E., Teigland, M. B., and Yarborough, J. H.: Use of Sodium Sulfonamides as Single Injection Specific Treatment in Foot Rot. J.A.V.M.A.,

111, (Sept., 1947): 208.*McAuliff, J. L., and Phillips, W. V.: Use of Sodium Sulfamerazine in Foot Infections in Cattle.

Vet. Med., 42, (Oct., 1947): 374.

*Candlin, Francis T.: The Use of Sodium Sulfamerazine in Foot Rot (Infectious Pododermatitis, Interdigital Phlegmon) in Cattle. J.A.V.M.A., 111, (Oct., 1947): 278.

16Wastrack, W. R., and Lewis, G.: A Clinical Evaluation of Sulfamerazine in Infections of Cattle. J.A.V.M.A., 110, (Feb., 1947): 108.

"Bryan, A. H.: Sulfameragine in Veterinary Practice. J.A.V.M.A., 109, (July, 1946): 57.

1sThorp, W. T. S.: The Newer Sulfonamides in Veterinary Practice. J.A.V.M.A., 106, (Feb., 1945):

13Jones, L. Meyer: The Chemotherapy of Calf I. The Use of Sulfathiazole, Sulfa-Pneumonia II. The Use of Sulfathiazole, Sul pyridine, and Sulfadiazine in the Treatment Calf Pneumonia. Am. J. Vet. Res., 8, (Jan., 1947): 14.

¹⁴McAuliff, J. L.: Clinical Use of Sulfamerazine in the Treatment of Hemorrhagic Septicemia and the Treatment of Hemorrhagic Septicemi Pneumonia in Cattle. J.A.V.M.A., 110, 1947): 314.

MLanger, P. H., Burkhart, R. L., Schroeder, C. R., and Welsh, M.: Sulfamethazine Blood and Milk Concentrations in Dairy Cows. J. Dairy Sci., 31, (Feb., 1948): 103.

Methadon Hydrochloride

hydrochloride (C21 H27 NO Methadon HCl) is a new narcotic reputed to cause less nausea and emesis, and less respiratory depression than morphine. Lacking sedative action, it has no value as a preanesthetic but being slower in causing addiction it has been found useful in alleviating the misery of morphine withdrawal. According to the dynamics published by the Council of Pharmacy and Chemistry of the American Medical Association, methadon hydrochloride ought to be a useful drug in veterinary medicine to relieve moderate to severe pain of the continuous type. The effective oral dose (human) ranges around 7.5 mg. every three or four hours. It is a water-soluble, white, crystaline powder, available in tablet form. Prolonged abdominal pain, nonproductive coughing, pain of grave traumatism, and the distress of an ill-set fracture are among the conceivable indications in small animal medi-

Protein Therapy in Eczema

A calf, 17 days old, in bad condition from nonparasitic skin lesions developed during tick-feeding experiments, treated with nonspecific protein injections at the Izatnagar Veterinary Research Institute. There were total alopecia, hemorrhagic lesions, and scabs. After topical treatment had proved futile, parenteral milk therapy, having been found effective in moist eczema, was employed. Doses of 25, 30, 40, and 50 cc. were given subcutaneously in that order at four-day intervals. The calf recovered within a week following the last injections.-Indian Veterinary Journal, May, 1948.

Multiple Neoplasia with Metastasis in a Dog

A Case Report

ROSCOE O. SEALY, JR., D.V.M.

Kansas City, Kansas

A male Airedale, 16 years old, was presented for treatment and/or removal of an ulcerated tumor situated at the angle of the right mandible.

Fourteen months previously, a tumor, which had only recently invaded and ulcerated the overlying skin at this same point, had been removed by another veterinarian.



Fig. I—Fibrosarcoma of the skin on jaw, with metastasis to lung.

History taken from the dog's owner and the physical examination at the hospital revealed a very gray coat, teeth, and general body appearance, and apparent function excellent for the patient's age.

In addition to the walnut-sized, badly ulcerated tumor situated at the angle of the right mandible, there were smaller masses of subcutaneous neoplastic tissue extending from the base of the right ear to well below the angle of the mandible, a subcutaneous, hazelnut-sized tumor behind the right scapula, extreme atrophy of the left testicle, and enlargement of the right testicle to five times normal size.

After informing the owner of an unfavorable prognosis, operation of the ulcerated mandibular tumor was performed under light morphine-atropine-pentobarbital-sodium anesthesia, reinforced with procaine infiltration at the operative site.

As much tissue was removed as was deemed advisable, which included, in addition to the area of ulceration, six globular masses between the ear and mandible. These varied in size from a hazelnut to a walnut and enucleated readily from the alveolar subcutaneous tissue.

The dog made a splendid recovery not missing a meal, and in six days the nylon skin sutures were removed, healing having been by first intention.

Two months later, the dog was returned to be destroyed. According to the owner, ulceration had begun anew about two weeks after release from the hospital and had now reached about the degree that was found at the time of the last operation.

Euthanasia was effected with pentobarbi-



Fig. 2-Interstitial cell tumor of testis.

tal-sodium and autopsy performed immediately. The gross pathology evident was:

- 1) Right testicle enlarged to five times normal size and indurated;
- left testicle extremely atrophied, hardly recognizable as a testicle;
 - 3) prostate gland greatly enlarged;
- 4) both kidneys very fibrotic, the left one containing a large thin-walled cyst occupying about one-third of the kidney volume;
- 5) five small subglobular tumors varying from pea to hazelnut size on the pleura and pericardium:
- 6) left lung nearly replaced by a neoplastic mass;

7) enlarged subcutaneous lymph gland behind right scapula;

8) a subglobular mass about 2 in. in diameter located in the omentum at the head of the pancreas.

The histopathology as determined by the Army Institute of Pathology is as follows:

Skin.—A surgical specimen from skin reveals a large neoplasm which infiltrates the dermis and extends into the subcutis. The skin is ulcerated and infected. The new growth is made up of interlacing bundles of spindle shaped cells showing frequent mitoses. The tumor cells have a very irregular arrangement, are closely packed in some areas, and have a loose, myxomatous appearance in others.

Lung.—The lung includes large masses of tumor identical to those described under skin. These are obviously metastases and invade and compress the lung parenchyma. There is

considerable anthracosis present.

Testis.—One testis includes a large neoplastic mass which enlarges the organ and displaces much of the seminiferous tubules. The tumor is made up of large eosinophilic-staining cells which have large ovoid nuclei and a foamy, sometimes vacuolated cytoplasm. The tumor cells are supported by a richly vascular stroma which occasionally contains cavernous spaces. This new tumor is obviously different from that seen in the skin and lung. The seminiferous tubules of the remaining testis show no spermatogenesis and for the most part are lined with single row of Sertoli cells.

Epididymis.—There are several foci of lymphocytes in the stroma. One large canalized, thrombosed artery is present in the section and hemorrage and necrosis are seen in the adja-

cent infarcted area.

Adrenal.—The medulla contains a circumscribed nodule which compresses the normal medullary tissue and expands the diameter of the gland. This nodule is made up of dark staining cells closely packed with granular, purple staining cytoplasm; nuclei are variable in size and shape, but usually containing deeply basophilic granules. These cells occasionally form incomplete acini, usually with a definite relationship to blood vessels.

Prostate,—The prostatie acini are quite variable. Some are large, dilated spaces lined with flattened epithelium, while others are lined with tall columnar epithelial cells which form many infolding projections into the lumen. The interstitial stroma is occasionally edematous, quite vascular, and contains many lym-

phocytes and plasma cells.

Spleen.—The spleen contains considerable pigment and scattered arteriolarsclerosis is

recognized.

Liver.—The hepatic sinusoids are dilated and filled with blood and there is considerable formol precipitated hemoglobin throughout the section.

Lymph Node.—One section of the lymph node contains numerous pigment-bearing macrophages in the medullary sinuses, particularly near the hilus.

Kidney.—There is extensive thickening of the interstitial connective tissue associated with many dilated collecting tubules and scattered sclerosed glomeruli. Albuminous fluid is seen in many collecting tubules, some of which are dilated to cystic proportions.

Diagnoses.—(1) Fibrosarcoma, skin of jaw, canine, with metastasis to lung. (2) Interstitial cell tumor of testis, canine. (3) Adenoma of adrenal medulla, canine. (4) Chronic interstitial nephritis, cause unknown. (5) Chronic prostatitis, cause unknown.

The interesting features of this case are the multiple neoplasia with metastasis of one form and the apparent good health of the dog despite his affliction.

Trichinosis has not been found in man or any other host, including rats, in Puerto Rico.—J. Parasitol., June, 1948.

Trace Elements of the Animal Organism*

In recent years, the frequency of maladies of farm animals due to subnormal or excess of trace elements in the feed have increased in Holland. An understanding of the biochemic functions and the interrelations of the different elements of the body of animals is indispensable to diagnosis and rational treatment. The importance of infinitely small amounts of trace elements is derived from their catalytic properties, their ions form compounds with enzymes. hormones, and vitamins which also possess biocatalytic properties, on the one hand, and act as activators of enzymes on the other. Four of these processes essential to normal life are involved:

- synthesis and destruction of tissular elements;
- 2) energy production;
- 3) detoxification of endogenous poisons; and
- nervous and humoral regulation of physiologic functions.

An understanding of the biochemic actions of trace elements furnishes new perspectives in respect to certain maladies: pica, avitaminosis and hypervitaminosis, grass tetany, ketosis, cancer, etc.

^{*}Seekles, L.: The Importance of Trace Elements in the Body of Animals (abridged and translated), Tijdschr. Diergeneesk., 1946. Abstr. Rev. Méd. Vét., 98, (Nov., 1947): 518.

Observations on Pathogenicity of Strongyloides Parasites in Ruminants

C. A. WOODHOUSE, D.V.M., M.S.

Wilmington, Delaware

OVA OF Strongyloides papillosus are observed regularly during routine examinations of sheep and cattle feces. Worms of this species are frequently recovered during routine autopsies of ruminants when the intestinal tract is carefully examined for these small parasitic forms. Although the presence of this parasite in the ruminant intestinal tract is generally recognized, little consideration has been given to it as a serious pathogen. Mönnig1 states, "The worms penetrate into the mucosa of the intestine, but are on the whole not very pathogenic, especially Strongyloides papillosus in sheep." Beveridge2 has shown that the larvae of S. papillosus penetrating through the skin of the feet of sheep are an important factor in the introduction of the bacillus Necrophorus which causes foot rot. Clunies-Ross and Gordon3 state: "The parasitic females have not been credited with any definite pathogenic effects in sheep which often suffer massive infection without giving evidence of ill effects."

Late in the summer of 1941, 2 rams were brought to the Animal Disease Laboratory of the Texas Agricultural Experiment Station, Angleton, for examination. Both were weak and emaciated, and exhibited typical symptoms of chronic parasitosis. Their skins were pale and inelastic and their wool was dry and lifeless. The rams were held for observation and fecal samples were collected. It was noted that the animals drank abnormal quantities of water and were almost continuously voiding small amounts of urine. An examination of the fecal samples revealed large numbers of parasitic ova with a preponderance of Strongyloides ova.

The possibility that this intestinal nematode is of considerable importance as a pathogen was suggested by the death of experimental calf 478 in September, 1940, which upon autopsy revealed an extremely heavy infection with S. papillosus; the ob-

servation of severe diarrhea in young calves during the winter of 1940-1941 in which fecal examinations revealed almost pure culture infections with Strongyloides; and the observation of extremely heavy Strongyloides infections, based quite largely on fecal examinations in several sheep presented at the laboratory during the year. In an effort to prove or disprove the pathogenicity of Strongyloides, the following experiments were made.

EXPERIMENTAL OVINE INFECTION-RAM LAMB 231

A ram lamb which had been raised from birth under conditions designed to keep it free of gastrointestinal parasites was available. The lamb was in excellent physical condition, fat, and doing well on a ration of alfalfa hay and grain concentrate. A fecal sample from the lamb examined Sept. 4, 1941, showed only one Strongyloides and four Trichuris ova in a sugar concentration of a 4-cc. sample of 1:200 fecal dilution.

On September 4, a culture of Strongyloides larvae, collected under laboratory conditions from a fecal sample obtained from 1 of the 2 rams mentioned earlier in this report, was applied dermally to an area of skin over the right lumbar region. The wool was clipped from the area and the larvae applied on a moist square of cotton held in place with adhesive cross strips.

The next day, the cotton pad was removed. From the marked erythema and papular appearance of the skin, it was presumed that larval penetration had occurred. There was considerable pruritus, as evidenced by an uneasiness of the lamb, and considerable edema of the subcutis around the point of application.

Although the lamb was beginning to show symptoms suggestive of an infection from the first application of larvae, a second culture was available and it was applied to the left lumbar area on September 20. The dermal reaction to the second application was not as severe as was the reaction to the first application.

The first fecal sample for parasite ova examination was obtained September 25, or twenty-one days after the first application of larvae. An average of two counts showed 22, 300 Strongyloides ova per gram of feces.

Former Parasitologist, Texas Agricultural Experiment Station, Sub-Station No. 3, Angleton, Texas; at present, research veterinarian, E. I. du Pont de Nemours & Co., Wilmington, Del.

The lamb's appetite began to decline within one week after the initial application of larvae, and by October 2 it was definitely off feed. The lamb had lost weight and was considerably dehydrated, even though water in abnormal quantities was being consumed each day. Similar to the original rams observed, the experimental lamb was almost continuously voiding urine.

A fecal examination made October 7, thirtythree days after the initial application of larvae, showed 92,600 ova/Gm. of feces, of which all but 600 were Strongyloides. The other species identified was Haemonchus contortus.

The experimental lamb continued to decline and died October 10, thirty-six days after the primary infection.

At autopsy, the gross pathology was that of extreme emaciation and dehydration of the body tissues. The intestinal tract was severely congested and the mucous surface resembled a piece of raw meat. An examination of the gastrointestinal tract for parasites revealed the following:

no romo mang.	
	Worms
Abomasum-H. contortus	10
Small intestine-8. papillosus	
Average of two dilution counts	31.900
Cecum-T. ovis	
Total	31.954

EXPERIMENTAL BOVINE INFECTION-STEER 477

In an effort to show whether Strongyloides of ovine origin were cross-infective to bovine animals, the following experiment was made.

Experimental steer 477, 18 months of age and in excellent physical condition, was moved to a stall in the laboratory barns Sept. 25, 1941. A preliminary fecal examination of the steer was essentially negative for nematode ova. The hair was clipped close to the skin from an area 4 in. square over the right transverse processes of the lumbar vertebrae.

A culture of Strongyloides larvae was harvested from a fecal sample collected from 1 of the 2 rams mentioned in the first part of this report. These larvae were applied dermally on September 27 to the prepared area of skin after first transferring them to a moist square of cotton. The cotton was held in place by cross-tapes which were affixed to the hair with flexible collodion. Within an hour, the steer had torn the pad loose, undoubtedly because of the pruritus incident to the penetration of larvae, and it was found lying on the floor of the stall.

A second culture of larvae of ovine origin was applied dermally on September 29, this time over the left lumbar area. The steer was haltered and tied short. A marked pruritus occurred as was evidenced by the uneasiness

of the steer and the effort it made to get to the pad.

The following day the cotton pad was removed. There was a marked edema of the subcutis that extended well beyond the limits of the area covered by the pad, and which persisted for several days. Serum and a slight amount of hemorrhage were present on the surface of the skin at point of application of the larvae. The serum coagulated and formed a scablike structure over the area.

The daily temperature of the steer was normal for five days following application of the larvae. On the sixth day and successive days, it rose to 104.8, 106, 105.6, 105.8, 104.6, 105.4, and 102.2 F., respectively. From here on to the termination of the experiment, the temperatures were well within the normal range.

The steer began to go off feed with the rise in temperature and did not come back to normal eating until the eighteenth day following application of the larvae.

Fecal discharges from the steer began to soften on the tenth day following application of the larvae. By the twelfth day, a severe diarrhea had developed which persisted until the eighteenth day, at which time the consistency of the feces became normal.

After the eighteenth day of this experiment, the steer began to improve gradually and, finally, complete recovery ensued.

Facilities for weighing this animal were not available, but it is estimated that the steer lost nearly ¼ of his initial weight during the first three weeks of this experiment.

Frequent examinations of feces from the steer were made until November 1, or thirty-two days after the application of Strongyloides larvae, but in no case were we able to demonstrate a patent infection by the presence of ova of this parasite in the feces.

These experiments were conducted, primarily, in anticipation of further work on this parasite in which better controls would be maintained. However, the author's call to active duty in the Army prevented a continuation of these studies. These observations are presented now in the hope that someone will look more closely into the pathogenic possibilities of 8. papillosus in the ruminant hosts.

SUMMARY

- 1) The clinical appearance of Strongyloides papillosus infection is reported.
- An experimental infection of a ram lamb with S. papillosus is described.
- 3) An attempt to experimentally infect a steer with S. papillosus of ovine origin is described. Although the parasite did not become patent in the bovine host, severe preparent symptoms were observed.
 - 4) Further studies to determine the true

pathogenicity of S. papillosus to the ruminant hosts are indicated.

References

¹Mönnig, H. O.: Veterinary Helminthology and Entomology. Wm. Wood & Co., Baltimore, Md., 2nd Ed. 1938

Beveridge, W. F. B.: Foot Rot in Sheep: Skin

Penetration by Strongyloides Larvae as a Predispos-ing Fact. Aust. Vet. J., 10, (1934): 43-54. *Clunies-Ross, I. and Gordon, H. McL.: The In-ternal Parasites and Parasitic Disease of Sheep. Angus & Robertson Ltd., Sydney, Australia. 1936.

Phenothiazine Toxicosis

In analyzing a thesis entitled "Sur la toxicite de phenothiazine" which was accepted by the faculty of Lyon for the doctorate in veterinary medicine, the Commission des Récompenses wrote* in behalf of the author, L. Durin:

At this hour, wherever works on parasitology have taken their former place, it is not without interest to look among the new substances that are the most efficacious and least toxic. In this connection, much has been written about the thiazines, particularly phenothiazine (tiodiphenylamine) whose antiverminous value is incontestable. There is, however, lack of accord as to the dangers of its use and its variable tolerance in the different species of The vast bibliography shows that strongyles and cylicostomes are sensitive to its action and that oxyures and ascarids are quite resistant.

In the horse, for example, phenothiazine may cause grave intoxications manifested by hemorrhagic icterus and nephritic hematuria. The grave poisonings appear to be caused by the worm-laden gastrointestinal tract and the anemia induced by blood-sucking worms which parasitize young horses. Thus, the animals most in need of anthelmintic treatment suffer most from phenothiazine poisoning. This drug should be reserved for strongyle and cylicostome infections - types of parasitoses which are highly resistant to all other anthelmintics. Moreover, given in the feed of horses and in the salt lick of ruminants, it is a preventive of outstanding value.

In fine, this review of the literature on phenothiazine deplores its promiscuous usage as much as it commends its value in well-determined indications and in wellregulated dosage.

Fatty degeneration of the liver in mink (so-called vellow fat) is seen about twice as often in females as in males.-T. T. Chaddock, D.V.M.

Vitamin A (=Axerophtol)

So much has been written about vitamin A, axerophtol, antixerophthalmic vitamin, protector of epithelium, that its very name is as common as Epsom salt and saltpeter, but the work that led to its discovery and the subsequent knowledge of its function in higher life will always remain fascinating. This is true not only because of the visible effects of its absence but because, more than any of the other vitamins, it ushered in the "era of vitamins," the slow birth of which occurred from 1897 to 1913 -when (1) Eikjman in 1897 found the cause of beriberi, an avitaminosis B; (2) Stepp in 1909 showed that laboratory rodents could not be nourished on purified diets; and (3) McCollum in 1913-1914 disclosed the presence of an essential fat-soluble growth and antixerophthamia factor in milk and cod liver oil. The fineness of these researches ought to be kept uppermost in one's mental budget. It was early known, for example, that this fat-soluble was of vegetable origin but strangely no vegetable consumed by cattle or fish contained any vitamin A. There was still to discover its precursors-three caroteneswhich the body converts into the hitherto mysterious factor. The investigational steps that led to the crystallization and synthesis of vitamin A represents impressive refinement in research work well worth keeping in mind.

Treatment of Boils in Mink

Incision and squeezing of the abscessed content is probably the worst way to treat boils in mink, as this causes breakdown and necrosis of adjacent healthy tissue, increases the size of the ulcer, prolongs healing, and facilitates spread of the infection (usually caused by Staphylococcus aureus) to surrounding tissues and the stream.

The preferred treatment is daily intramuscular injection of 2,000 units of penicillin per pound of weight, leaving the boil to open spontaneously after it "comes to a head." If it does not open, a small incision should be made over the abscess to permit escape of the necrotic tissue and exudate. Drugs or disinfectants should not be applied to the open wound.-H. R. Foreman, Am. Fur Breeder, July, 1948.

^{*}Abstract from Bulletin de l'Académie Vétérinaire de France, 21, (April, 1948): 138-139.

Surital Sodium, A New Anesthetic and Hypnotic

Studies in Dogs

T. F. REUTNER, D.V.M., M.S., and O. M. GRUHZIT, M.S., M.D.

Detroit, Michigan

BARBITURATES which act for only a short time have been used with varying degrees of success to produce surgical anesthesia in dogs. Compounds which produce anesthesia for short periods have a definite advantage in veterinary medicine for certain routine operations. From a series of short-acting thiobarbiturates studied, surital sodium 5-allyl-5-(1-methylbutyl)-2-thiobarbituric acid) was chosen because of its low toxicity and desirable pharmacologic properties. 1-4 The purpose of this study was to determine the pharmacologic activity of this compound perorally and parenterally in dogs, mice, rats, and rabbits. The present report deals with the effects of its use intravenously in dogs and includes a limited clinical application.

MATERIALS AND METHODS

Normal adult male dogs of mixed breeds, free of symptoms of disease, were used in this study. They were held for observation for periods of two to four weeks prior to use. During this observation period, red, white, and differential blood cell counts, hemoglobin determinations, and urine analyses were made to eliminate the possible presence of subclinical disease processes. During the course of the studies, blood and urine analyses were made frequently for possible effect of surital sodium on the hematopoletic system and the kidneys.

Surital sodium is a yellow, crystalline compound giving a clear, yellow aqueous solution having an alkaline reaction of pH 10.3. It was administered intravenously as a 2.5 per cent aqueous solution at the rate of 3 cc. per minute. Temperature, pulse, and respiratory rates were taken each day prior to injection and at half-hour intervals following injection, until animals returned to a normal condition. To determine the threshold of pain, the external ear was strongly pinched. All observations were made by the same operator.

Groups of 3 to 5 dogs were placed on dose levels of 15.0, 17.5, 20.0, 22.5, and 25.0 mg. of surital sodium per kilogram of body weight. Each dog received 1 to 18 injections which were

made on consecutive or alternate days over periods of one to forty-nine days. A total of 170 injections was made on a group of 19 dogs.

RESULTS

Hypnosis.—Anesthesia was induced without excitement or irritability. All animals on all dose levels became flaccidly prostrate immediately following the intravenous injection of surital. The average duration of flaccid prostration increased with the dose level from twenty-three minutes for the 15.0 mg./kg. dose to one hour and seven minutes for the 25.0 mg./kg. dose. The recovery period was gradual and without undesirable reactions. All animals were completely recovered in three to five hours. Table 1 shows the average recovery times for the different dosage groups.

Analgesia.—Complete loss of the pain sensation was not produced in the dogs receiving 15.0 mg./kg. of the drug. The pain sensation, however, was appreciably decreased. Analgesia lasting an average of thirteen minutes was produced in 4 dogs receiving 15 injections of 17.5 mg./kg. The duration of the period of anesthesia increased with larger dosc levels, with an average of thirty-three minutes for (5 dogs, 38 injections) the 25.0 mg./kg. dose.

Pulse, Respiration, and Temperature.—Pulse rates taken immediately following the induction of anesthesia were slightly lower than the pre-injection pulse rates in all of the 19 dogs receiving the reported dosages of the anesthetic. Occasionally, an insignificant rise in pulse rates occurred. In addition to a slight depression of pulse rates, there was an increase in force and amplitude.

A more significant change occurred in the respiratory rates, which were decreased 36 to 61 per cent of the pre-injection values. The respirations became deep and regular and averaged 8 to 14 per minute. Artificial respiration was administered six times out of a total of 170 injections. The 15.0 mg./kg. dose intravenously produced no toxic reactions in the 3 dogs receiving this

Surital Sodium is a Parke, Davis and Co. trademark. Not available for clinical use at present. From Research Laboratories, Parke, Davis and Co., Detroit, Mich.

treatment. One dog receiving 17.5 mg./kg. died following the third injection in spite of artificial respiration. Two of 5 dogs receiving 25.0 mg./kg. died following, respectively, the first and fourteenth injection. The changes in temperature, respiratory rates, and pulse for the various dose groups are shown in table 2.

Rectal temperatures were lowered 0.9 to 2.3 degrees Fahrenheit in one-half to one hour following the injection of surital (table 2). This decrease was evident while the animals were flaccidly prostrate. Tem-

A 2.5 per cent aqueous solution was injected into the jugular vein at the rate of 3 cc. per minute.

A dose of 17.5 mg./kg. was found to produce an ideal anesthesia of an average duration of fifteen minutes in 87.5 per cent of 24 dogs. Two dogs required short periods of artificial respiration following completion of the injection. A slower rate of injection usually prevented the respiratory embarrassment. Two dogs, one of which had received artificial respiration, required additional amounts of the anes-

TABLE I—Summary of Doze Schedule, Recovery Period, and Duration of Analgesia of Dogs Receiving Surital Sodium Intravenously

		Inject.			duration			overy tim	ng condi	tion	
Mg./Kg.	Dogs (No.)	per dog	Total inject.	Pros- tration	Anal- gesia	P	Cr	(hours a	nd minu	I+	N
15.0	3	4	12	0:23	None	0:23	0:35	1:13	1:23	2:55	4:17
17.5	4	3-4	15	0:29	13.4	0:29	0:52	1:22	3:07	3:42	4:54
20.0	3	18	54	0:33	14.4	0:33	0:45	1:04	1:19	1:59	3:00
22.5	4	4-18	51	0:38	18.2	0:38	0:58	1:11	1:38	2:27	3:25
25.0	5	1-17	38	1:07	33.4	1:07	1:33	2:05	2:59	3:50	4:32

P=Prostrate (not relaxed); Cr=crawl (unable to stand); I+++=severe incoördination; I++=incoördination; N=normal.

peratures rapidly returned to normal as the animals recovered from the anesthesia.

Hematology and Urinalysis.—Red, white, and differential blood cell counts and hemoglobin values remained normal in all 19 dogs throughout the test period. All urines were consistently negative for sugar and albumen.

RESULTS OF CLINICAL USE

Surital sodium anesthesia was used in a total of 53 operations on adult male dogs. The operations consisted of intramuscular implantations of foreign bodies, eccetomies, tumor removals, and laparotomies for liver and spleen surgery. Doses of 17.5 (24 dogs), 20.0 (12 dogs), and 22.5 mg./kg. (17 dogs) were used (table 3) to induce anesthesia using the technique described.

thetic when pain was felt prior to completion of the operation.

Twelve operated dogs received 20.0 mg./kg. of surital. The anesthesia produced was satisfactory in 41.6 per cent of operations of an average of twenty-seven minutes' duration. In the remaining 58.4 per cent, additional amounts were required. This dose was found satisfactory for operations of twenty minutes or less in duration. No deaths or respiratory embarrassment occurred in this series of 12 dogs.

Seventeen dogs received 22.5 mg./kg. of surital for operations lasting an average of thirty-five minutes. Anesthesia was satisfactory in 52.9 per cent of the cases. In 29.4 per cent of the cases, additional anesthetic was required and 3 deaths (17.6%) occurred from respiratory failure.

0

t

d

f

C

p

a

tı

(n

TABLE 2-Pulse, Respiratory Rates, and Temperatures of Dogs Following Injection of Surital Sodium

Dogs (No.)	Mg./Kg.	Inject.	Pulse rate decrease (%)	Respira- tion rate decrease (%)	Times artificial respira- tion given	Temperature decrease (F.)
3	15.0	12 .	6.8	-41.8	0	-0.9 (¼ hr.)
4	17.5	15	— 3.1	50.5	1	-1.9 (1/2 hr.)
3	20.0	54	-10.4	-36.1	0	-1.4 (½ hr.)
4	22.5	51	+ 2.3	53.9	0	-1.4 (½ hr.)
5	25.0	38	-14.0	61.0	5	-2.3 (1 hr.)

DISCUSSION

From data compiled on both the experimental use of surital sodium in 19 dogs and its use in 53 operations, a dose of 17.5 mg./kg. administered intravenously was found satisfactory for abolishing pain for periods of twelve to fifteen minutes. An anesthesia of this duration was sufficient

administered intravenously in 28 dogs produced surgical anesthesia lasting, on an average, about fifteen minutes.

 The induction and recovery periods were free of side reactions.

4) Recovery was complete in three to five hours.

5) Data is presented on its use in fifty-

TABLE 3-Data Compiled from Fifty-three Operations on Dogs Using Surital Sodium as Anesthetic

Mg./Kg.	Dogs (No.)	Ave. time (min.) from inject. to completion of operation	Anesthesia satis- factory (% of cases)	Add'l surital sodium (% of cases)	Artificial respiration (% of cases)	Dogs dead (%)
17.5	24	15 (11-20)	87.5	9.2*	9.2*	0
20.0	12 .	27 (22-55)	41.6	58.4	0	0
22.5	17	35 (13-50)	52.9	29.4	17.6	17.6

*One dog required artificial respiration and additional amounts of surital sodium.

for castrations, spayings, teeth extractions, etc. The induction and recovery periods were without undesirable side reactions, and recovery was complete in three to five hours.

As with most barbiturates, the respiration was depressed and, in fatal doses, stopped a few minutes prior to heart failure. When this occurred, the use of gentle artificial respiration for a few minutes usually restored regular breathing. The administration should be slow and at an even rate of not more than 3 cc. per minute of a 2.5 per cent solution. When the respiratory rate is severely depressed, more time should be taken to complete the injection.

It is now routine for us to administer 17.5 mg./kg. of this drug for all operations of short duration. If unforeseen difficulties are encountered and the operation is prolonged, an additional one-fourth of the original dose is administered. This procedure has proved satisfactory for operations lasting up to forty-five minutes. The duration of surgical anesthesia has been found to be appreciably increased by the combined use of an analgetic, i.e., morphine or methadon. Surital sodium was also active when administered orally or intraperitoneally. These routes of administration are now under study.

SUMMARY

1) Surital sodium (sodium 5-allyl-5-(1-methylbutyl)-2-thiobarbituric acid), a new short-acting barbiturate, has been studied extensively in 72 dogs.

2) A dose of 17.5 mg./kg. (1/8 gr./lb.)

three operations (castrations, laparotomies, tumor removals).

References

Gruhzit, O. M., Dox, A. W., Rowe, L. W., and Dodd, M. C.: A Pharmacologic Study of Certain Thiobarbiturates, J. Pharmacol. and Exptl. Therap.,

Thiobarbiturates, J. Pharmacol. and Exptl. Therap., 69, (June, 1937): 125-142.

Shideman, F. E., Kelly, A. R., and Adams, B. J.: The Rôle of the Liver in the Detoxification of Thiopental (Pentothal) and Two Other Thiobarbiturates, J. Pharmacol. and Exptl. Therap., 91, (Dec., 1947): 321

Wyngaarden, J. B., Woods, L. A., Ridley, R., and Seevers, M. H.: Anesthetic Properties of Several Thiobarbiturates in Dogs, Federal Proc., 6, (1947):

'Wyngaarden, J. B., Woods, L. A., and Seevers, M. H.: The Cumulative Action of Certain Thiobarbiturates in Dogs, Federal Proc., 6, (1947): 388-389.

What Price Bruising?

Out of 15,000,000 cattle, 50,000,000 hogs, 16,000,000 sheep, and 8,000,000 calves slaughtered under BAI inspection in 1947, 70,000,000 lb. of meat, worth \$25,000,000, were condemned on account of bruisings and deaths inflicted on the way from the farm to the killing floor. The figures are in round numbers but clearly illustrate the loss of a great deal of food that could be largely prevented. Causes: brutal handlers, mixed groupings, overcrowding, poor footing (trucks), bad ventilation en route, horn thrusts. Remedy: keep livestock comfortable in transit.—From Roy L. Cuff in an Armour & Company release, June 18, 1948.

Enlarged front legs in pigs may be the result of riboflavin deficiency in the rations of sows.

NUTRITION

Fat Digestion

In judging the nutritive value of forage, it is sound thinking to put the importance of fats next to that of proteins. That Germany lost World War I when fats gave out is common knowledge, and scraping the bottom of the barrel for culinary hydrocarbons during World War II is unforgotten. Anyhow, these alleged demonstrations of dietary values set the students of animal nutrition to revising their abiding faith in the old teachings. In the matter of fat digestion, for example, the old belief that the stomach (=abomasum in ruminants) is a fat-splitting organ is now known to be erroneous. The stomach is a reservoir that holds fats to release them at a slow rate to the "soap-making" mechanism beyond. The chemical action of its secretions is of minor importance. Moreover, the term "fat-splitting" is not well taken. Except for the portion of fat broken down (CO2+H2O) to liberate energy, no organic radical is less subject to "splitting" than the molecule of fat. The chief digestive enzyme of fats is the almost overlooked steapsin of the pancreas-enzyme par excellence of animal nutrition. Its action is preëminent in the preparation of fats for absorption. Whatever fat escapes its action is taken care of by a particular lipase of the intestine, or taken into the lymphatic circulation unchanged, or passed along for coproctic evacuation.

Important as the liver is to the utilization of fats, its functions in alimentary digestion are (1) to change the medium, not to strong alkalinity as is generally supposed but, to a pH close to neutral; (2) to lower the surface tension of fats to the benefit of the pancreatic and intestinal lipases; and (3) to regulate the absorption of fats and biliary substances by the intestinal walls. Here is staged one of the most essential processes of higher life. Fats enter the intestinal mucous membrane in the form of complex compounds produced by the action of bile salts upon the watersoluble acids liberated by the lipases above mentioned only, however, to be transformed

there by chemical action into triglyceride preparatory to free absorption by the venous (portal) circulation. A fact to keep in mind is that the most important phase of fat digestion takes place within the confines of the mucous membrane when phosphorus enters into the synthesis to form the phospholipids without which life would not long survive. In veterinary medicine, too little is thought of this barrier between thrift and ill health-between life and death. In the ruminating herbivores, the synthetic output of the forestomach is trivia compared with what takes place in the first portion of intestine, and, in our monogastric subjects, the stomach is blamed, erroneously, for aberrant processes beyond. Deeply concerned is the character of dietary fat and the ability of the intestine to digest and absorb it. The quantity being equal, the fattening property of ingested fat rests largely in its quality on arrival at the site of its absorption within the intestinal wall where phospholipids are formed to complete the process of lipidic digestion. Quality in this sense refers to its ability to be digested, regardless of kind or source, of which there are many, e.g., butter, lard, and oleomargarine of the human dietary and peanut oil and corn oil in the feeding of swine.

The general belief that enzymic action is a prerequisite to the absorption and utilization of fats is challenged by the alternative that a proportion of the fatty content of feed enters the lymphatic system (lacteals) unchanged by intestinal digestion. But this is a controversy that cannot be discussed here, basic as it is. The end result may be the same. The fate of fats in animal nutrition may be summarized as follows:

 A considerable proportion of fats forms carbohydrate and thus participates in liberating energy. The fat of foodstuffs (human) provides two and one-fourth times as many calories as equivalent amounts of proteins or starches. Unused fat is stored away as adipose tissue—an important factor in the gainproducing property of livestock feedstuffs.

3) Fats participate in external secretions. They provide the fat secretions (e.g., milk) and, like other stable ingredients of external secretions, they determine the amount of liquid a secretory organ produces. If a cow gives a quart of milk or a gallon, the butterfat percentage is the same in both quantities.

4) While most of the circulating fats are used in the ways aforementioned, some fat, for reason unknown, is excreted by the

intestine, whence it came.

5) The old belief that fat deposits meet the demand for energy that is not fulfilled by the feed consumed is but a near truth. In sickness and hunger, fat wrapped about the tissues adds little to the chance of survival through the energy it is able to liberate. The thin are the better risk. Clinical observation is proof that when the flow of energy from feed stops, fat depots also stop providing strength. The cause appears to have been explained. Fat piled intentionally within the structure of the body by feeding does not lie functionally inert until drawn upon to supply energy. The fat depots function constantly as pathways for dietary-produced energy to the site of expenditure. The fatty acids of feed mixed with those of the fat depots are currently transported to and from the organs. That this previously unknown function of adipose tissue is a noteworthy addition to veterinary knowledge is self-evident, because piling on fat for weight gains is one of the cardinal objectives of animal production, regardless of its ill effects on physical stamina. It is interesting to know that fat depots appear to perform a vital function and that the overload obviously participates in the maintenance of health.

This brief outline of fat digestion is not presented as a technical review of the subject. The object is to set that phase of digestion apart as a hint that the hackneyed animal physiology of the nineteenth century is undergoing revision.

In handling the "stiff lamb" problem under range conditions, it "hardly seems practicable" to follow the vitamin E feeding practice recommended by various investigators, says *The California Wool Grower* (Oct. 21, 1947).

Soft Shell Eggs

Calcium deficiency takes a big cut out of the poultry industry in the form of soft shell eggs broken in transit and, unfortunately, nothing much can be done about it because the deficiency is more functional than material. After some weeks of heavy laying, the mechanism of shell making seems unable to keep pace with the rapid building of the interior structure, since supplementing the feed with mineral elements not only fails to thicken the shell but rather impairs the appetite. Assuming that the hen is getting a reasonably well-balanced ration, thin shell is a penalty of heavy production.

Experimental Canine Hysteria

The regularity with which canine hysteria (= running fits) can be provoked by feeding breads containing nitrogen trichloride continues to excite interest. A nervous upset as characteristic as running fits can be caused in twenty-four hours by feeding but one meal containing 300 Gm. of flour treated with 80 mg. NCl_a/100 Gm. of flour. Moran of the Cereals Research Station at St. Albans, England, has demonstrated a far-reaching lesson on the chemistry of nutrition.

Commercial Feeds and the Veterinarian.

The May 15 issue of Feedstuffs, outstanding spokesman of the manufacturers and dealers in commercial feed, contains two classical articles of prominent veterinarians: one by Dean W. A. Hagan, president of the AVMA titled, "The Feed Dealer and the Practicing Veterinarian," and another by Dr. A. R. Theobald, president of the AAHA, on "Some Observations on Small Animal Feeding." Both are articles of the sort that cultivate an understanding of the veterinarian's intimate knowledge of animal bromatology.

Extended Feeding of Colostrum.—The feeding of surplus colostrum to calves would save several million pounds of milk annually (J. Dairy Sci., July, 1948), according to dairy scientists of Ohio State University. Calves fed colostrum beyond the usual first three days of life made more rapid gains and benefited from better physical condition.

EDITORIAL

Brucellosis Eradication and the Practitioner

Veterinarians, cattle owners, and extension workers from 12 middle western states met at Chicago in June to assess the progress made in brucellosis eradication during recent years, and to plan for a more effective attack on the disease as soon as possible. Sponsored by the U. S. Bureau of Animal Industry, invitations were also issued to representatives from the AVMA, U. S. Public Health Service, state sanitary officials, extension service, and to farm, livestock, and veterinary associations.

PRACTITIONER KEY FIGURE

The discussions and deliberations served to crystallize some opinions and beliefs which are highly significant to the practicing veterinarians and to all others interested in the welfare of the livestock industry as affected by the services rendered by the veterinary profession. A significant unanimity among all representatives developed as to the position occupied by the practicing veterinarian in the brucellosis eradication program. Almost without exception, it was stated that the local practitioner is the key figure. Livestock producers and regulatory officials were generous in their praise of the part played by many practitioners in making the program function and accomplish its objective. Other producers and officials were almost equally vigorous in their criticism of those practitioners who have failed to cooperate.

In order that the veterinary profession achieve a status of agreement which will permit presentation of a united front by officials of the AVMA and of its constituent associations, as well as veterinarians in extension and regulatory positions, we strongly urge that every veterinarian consider the premise that we should be engaged in a program of brucellosis eradication.

Among those qualified to judge, it is agreed that any program making it easier to live with the disease is doomed to eventual failure not only in the individual herd, but even more so on an area basis.

Having achieved this first step of always thinking, planning, and acting in terms of brucellosis eradication, the other steps follow logically. Among these is a realization that few herds are so situated and so maintained that they can plan an eradication program independently of their neighbors. In other words, eradication is simpler and much cheaper in the long run when attacked on an area basis. The size of the area should be not less than a township and preferably a county or a state.

ERADICATION POSSIBLE

If eradication is to be accomplished on an area basis, it is essential that a basically uniform plan be adopted for the entire area and for all areas enrolled under the plan. This is not to infer that a definite and inflexible plan is to be formulated and enforced, because no other disease exemplifies quite so forcibly the importance of local conditions of management, breeding, and interchange of animals as does bovine brucellosis. The basic plan must be sufficiently flexible to permit the veterinarian entrusted with the care of the herd to make minor modifications and revisions demanded by the management practices of the owner and the locality. If his mind has been focused on eradication, the veterinarian can and will make the changes needed for most efficient operation of the program.

UNIFORM PLANS

For the purpose of arriving at uniformity of thought and action, the United States Livestock Sanitary Association, through its Committee on Brucellosis, on Dec. 4, 1947, adopted, and has since publicized, four plans under which every type of cattle husbandry can concentrate on brucellosis eradication with but minor modifications to suit local needs. They are:

- Plan A. Test-and-slaughter; with or without calf vaccination.
- Plan B. Test, calf vaccination; temporary retention of reactors.
- Plan C. Calf vaccination without test of any part of the herd.
- Plan D. Adult vaccination.

The complete report of the Committee has been published in the Proceedings of the 51st Annual Meeting of the USLSA and is available from Dr. R. A. Hendershott, secretary. The report has also been mimeographed by the U. S. BAI, and a copy may be obtained through your federal veterinarian in charge.

During the two days of the conference, many angles of the brucellosis eradication program were discussed, but always the pivotal point was the attitude of the practicing veterinarian and the degree of coperation which the livestock industry may reasonably expect from him. It was abundantly evident that the practitioner who renders adequate service to his clients is held in high esteem, while the one who falls short is held responsible for lack of success.

RECORD OF VETERINARY PROFESSION

Because this editorial is directed at the alert veterinarian who is anxious to establish a record for himself and his profession of complete and efficient service, we need only remind him that if the brucellosis eradication program has a good record in an area, a portion of the credit undeniably reflects upon the participating veterinarian. By the same token, if the brucellosis eradication program is not making a suitable record of progress in an area, some of the blame for this failure is being reflected upon the individual veterinarian and the profession. Every AVMA member owes it to himself and to the profession to encourage his colleagues to engage in the program actively.

LAY WORKERS

Veterinary practitioners must engage in the brucellosis eradication campaign in the best interests of their clients and of the service record of their profession. Failure to do so now will mean the enlistment of lay help to work at the job. All parties interested in eradicating the disease have agreed that the practicing veterinarian can do the job most effectively—if he will. Some influential groups have failed to get

the necessary coöperation. These groups are actively advocating the use of lay assistants in the control program, and they justify their demands by pointing out that the participation of lay workers, while not preferred, is better than waiting for the noncoöperative local practitioner.

If brucellosis eradication is to be carried to a successful conclusion comparable to that realized in bovine tuberculosis, it is imperative that veterinary practitioners actively support the program.

Cassius Way

The untimely death of Past-President Cassius Way (CORN '07), 67, at his home, 13 Littlejohn Place, White Plains, N. Y., on August 5, briefly announced in the September Journal, leaves undone the grievous duty of paying tribute to a longtime friend and coworker. His tragic death was caused by an injury sustained from a Standard-bred horse he was treating at the Roosevelt Raceway, Westbury, L. I. Though thought, at first, to be trivial, the injury led to a fatal cerebral hemorrhage a few hours later.

Although generally considered a New York City practitioner since 1914, his services were widely sought in the Thoroughbred, Standardbred, and purebredcattle circles throughout the country; of recent years, mostly among the racing stables and horse-breeding farms along the eastern seaboard. The younger set may have forgotten that Dr. Way was one of the pioneers in the field of milk sanitation. While State Veterinarian James M. Wright of Illinois and Commissioner W. A. Evans of the Chicago Health Department were waging an historic battle against the hostile owners of tuberculous milk cows, young Way came out of Cornell to Illinois and did yeoman service in turning the fight toward the victory that was to give Chicago a clean milk supply. His educational work among the dairy farmers of the Chicago milk shed will be long remembered as the turning point toward the economic principle involved in clean stables and healthy herds.

As a representative of the Borden Company, the young Cornell graduate appears, in retrospect, to have been a pioneer in convincing the producers of market milk that it was stupid to keep dairy herds showing an incidence of tuberculosis rang-

ing from 30 to 60 per cent. "Clean up or else" was the Borden answer to organized opposition to purifying the city's milk supply at the source. None familiar with the early efforts to sanitize the market milk of large cities will forget this part of Dr. Way's early professional life, for he did much toward paving the way for the general acceptance of bovine tuberculosis eradication. In later years, he was also a prominent figure in certified milk production circles, particularly in the metropolitan area of New York. "Cash," as he was affectionately hailed, became a capable clinician, humane, skillful, well informed, a fluent writer, and a willing demonstrator of his art. Socially, he lives in our hearts as the bon vivant with a perpetual smile who often praised and seldom criticized.

In association work, without obvious solicitation, he was among the first to be thought of in choosing a leader for new movements and for the chairmanship of the instituted committees which render, unnoticed, the guidance needed to carry on. In this capacity, the decedent served as chairman of the Executive Board from 1922 to 1927 and again from 1934 to 1937; chairman of the Committee on Intelligence and Education in 1921-1922 and member from 1917 to 1922; chairman of the Committee on Legislation from 1937 to 1939 and member from 1928 to 1933 and again from 1936 to 1939; member of the Committee on Public Relations from 1940 to the time of his death; member-at-large of the Executive Board from 1921 to 1927 and again from 1934 to 1937; and was the president of the Association for the year 1939-1940. His presidential tenure is notable for the three outstanding steps which gave the AVMA the upswing the veterinary profession of this country needed and now enjoys: (1) maneuvering, without wrangle, a completely revised Constitution and By-Laws through the House of Representatives by providing each of its members, beforehand, with printed notes on the more debatable points to be adopted; (2) the authorization to publish the American Journal of Veterinary Research which ironed out a basic obstacle to the advancement of veterinary medicine in North America by providing space for the publication of scientific material for which the veterinary profession had neglected to furnish a medium; and (3) backing the workable system of nationwide distribution of news of

general interest, not only out of the pressroom of the annual AVMA meetings but throughout the year, that all men may know there is a veterinary profession. Out of this has grown the present day full-time program of public relations to which the Association devotes much effort as an essential factor in cultivating public appreciation of veterinary services.

Dr. Way arrived at the top not by having "greatness thrust upon him" but by continuous service of benefit to his survivors. He will be remembered by his generation for what he was and by future ones

for what he did.

Surviving are his widow, née Mary Hamilton, and his brother Daniel C. Way.

The World Food Situation

H. C. M. Case, University of Illinois, former consultant to the Senate Agricultural Subcommittee, asserts that one-half of the world's two billion people do not get enough to eat and that many face starvation each year. Having three acres of crop land per person, the people of the U. S. A. have fared better. "But what of the future?" the author asks. Soil and other natural resources have been robbed at a terrific rate for too long a time. Onesixth of our soil has been ruined beyond reclamation for cultivation. Abroad, Prof. J. M. Marrack, pathologist of the London Hospital Medical College (Brit. M. J., March 20, 1948), before the Anglo-Austrian Society, praised the U.S. A. for having managed to produce liberally for itself and for Europe and admonishes the European countries to finance their affairs in such a way as to provide their farmers with the necessary equipment to indulge in scientific methods in order that malnutrition might cease. The schemes of the UNRRA were too restricted and too short-lived to be entirely successful, Marrack goes on In short, these two freelyto stress. expressed views indicate that the food situation of the world is not good and requires considerable adjusting to set things right, here, in Europe, and everywhere.

The cattle empire in southwestern U.S.A., which grew up from the eradication of bovine piroplasmosis through researches of the U.S.BAI, occupies first place among the all-time achievements of veterinary science.

CURRENT LITERATURE

ABSTRACTS

Swine Brucellosis

Swine of both sexes and all ages are susceptible to Brucella suis when exposed through the alimentary canal, the copulatory organs, the conjunctiva, and by intradermal inoculation. One or more of the following symptoms are usually observed: abortion, weak or stillborn pigs, sterility, orchitis, paralysis, and lameness. Infection has been demonstrated more frequently in the reproductive organs of

boars than of sows.

Brucellergen appears to be unreliable as a diagnostic agent. Vaccination of gilts 4 to 5 months old with Brucella abortus strain 19 failed to produce a detectable degree of immunity, while a Br. suis vaccine produced a serviceable immunity for nine months but was ineffective at twenty-four months .- [C. A. Manthei: Research on Swine Brucellosis by the Bureau of Animal Industry. Am. J. Vet. Res., 9, (Jan., 1948): 40-45.1

Early Treatment for Ox Warbles

By examination of hides in the abattoir, the authors determined the time of arrival of hypoderma larvae in the subcutaneous tissues of the back. In the central zone of the U.S.S.R., this occurred in the latter half of January and early February. At this time, although the skin was perfectly smooth to the touch, it contained barely perceptible larval perforations. The developing nodules became palpable in the latter half of February.

Eleven larvicides were tested on a total of 2,766 cattle. The test preparations were applied on one side of the back, leaving the other side as a control. Treatment was begun in January, before the nodules were palpable, and was repeated two or three times at thirty-day intervals. The animals were observed three to four months for signs of toxicity, blood changes, milk yield, and larvicidal effect.

The most effective preparations were: Veratrum album (white hellebore) in 10 to 20 per cent aqueous decoction of the rhizome, DDT in 5 to 12 per cent suspensions in oil and water, and an aqueous pyrethrum extract containing 0.25 per cent pyrethrins. Derris prodducts were not used because they are not indigenous to the U.S.S.R.

The early treatment causes absorption of the larvae and complete histological resolution of the lesion.-[A. M. Pricelkov, M. G. Khatin,

and M. Z. Hanelina-Lurye: Early Therapy of Warble Disease of Cattle. Veterinariya, 25, (Jan., 1948): 14-17.]-R.E.H.

Folliculin Treatment in Retained Placenta

In a discussion of the rationale of folliculin therapy, the author cites evidence for ovarian activity at the time of parturition, and for the effect of folliculin on the mechanism of parturition through augmentation of posterior pituitary activity. Untoward effects of folliculin on the ovaries are ascribed to overdosage (10,000 to 100,000 mouse units).

Seven cows were treated with doses of 500 to 2,000 mouse units. The time between parturition and the injection of folliculin varied from twenty-six hours to five days. Firm attachment of the placenta was determined manually in each case. In 6 cows, the placenta was completely expelled in thirteen to fifty-six hours. Two cows received a second injection. In 1 case the placenta was removed manually because of infection.

Three goats were treated with 600 to 1,500 units. Placentae were expelled in thirteen to twenty-two hours after injection.

With the exception of the cow affected with endometritis, the cause of retention thought to be a low estrogen level resulting from nutritional deficiency. It was recommended that folliculin receive extensive field trials in cases of retained placenta of noninfectious origin .-- [V. V. Petropavlovski: Folliculin Therapy of Retained Placenta in the Cow and Goat. Veterinariya, 25, (Jan., 1948): 22-24.] -R.E.H.

(Note: The product was identified only by the manufactures' lot numbers. The mouse unit was not defined. Although "folliculin" is not now good usage in America, it was used throughout in Russian spelling.)-R.E.H.

Artificial Insemination and Intrauterine Medication in Cattle

Experiences in foreign countries, especially in Scandinavia, are reported and the instruments used both abroad and in Poland are described. While the left hand grasps the cervix, by way of the rectum, the right hand guides either the insemination tube or the medication catheter into the uterus. A perforation of either the vagina or the uterus should

be avoided.—[The Technique of Artificial Insemination and Intrauterine Medication in Cattle, Medycyna Weterynaryjna, 3, (1947): 592-595.]—L.I.H.

Ferret-Virus Canine Distemper Vaccine

Canine distemper virus passed through ferrets in France is still virulent for dogs after 60 passages, causing the disease in 11 per cent of the dogs injected. Green's American strain acts on the ferret the same as the French strain. Always, from the first passage on, it recuperated its virulence for dogs, infecting 10 per cent of them in doses of 25 mg. and 7 per cent in doses of 15 mg. A 10-mg. dose of first passage American ferret virus in France, when utilized as a vaccine for dogs, caused distemper in 2 per cent of the cases treated. The authors were able to draw the following conclusion: Serial passages through ferrets of distemper virus of canine origin produce a fixed virus which is capable of causing infection in dogs and that is characterized by a period of incubation of seven days, a grave syndrome comprising hemorrhagic enteritis and death in twenty-four to forty-eight hours after the appearance of the first symptoms. Often after a high number of passages, the animal dies eight or nine days after inoculation without having shown any symptoms .- [P. Goret and G. Yvore: Note on Carré's Virus Adapted to Ferrets; Its Employ in the Vaccination of Dogs (Green's Method), Compt. rend. Société de Biologie, 141, (1947): 932. Abstract, Rec. d. Méd. Vét., 124, (June, 1948): 276, and ibid. Fixed Canine Distemper Virus in the Ferret (titles translated), Compt. rend. Société de Biologie, 141, (1948): 423. Abstract, ibid.]

Allergic Diagnosis of Brucellosis

The aliergenic diagnostic agents in use in the Soviet Union, abortin and brucellysate, are undesirably antigenic when injected intradermally. They produce agglutinins which interfere with serologic diagnosis, they sensitize healthy animals to subsequent allergic tests, and they cause nonspecific reactions in 2 to 4 per cent of healthy animals on first injection.

D. A. Tsuverkalov and V. M. Krasov developed a "brucellohydrolysate" by subjecting the bacteria to hydrolysis with dilute acid under pressure. The product was an allergenic, but nonantigenic, component of the bacterial cell. Brucellohydrolysate was tested from 1936 to 1941 on 10,247 sheep, 874 swine, 869 cattle, and 175 horses. The allergenic diagnostic activity of the hydrolysate compared favorably with the old preparations. It did not stimulate the production of agglutinins, did not sensitize healthy animals, and produced no nonspecific reactions. Brucellohydrolysate has been approved for the diagnosis of brucellosis in sheep and swine in the U.S.S.R.—[V. M. Krasov: Results of Tests of

"Brucellohydrolysate" as an Allergenic Preparation for the Diagnosis of Brucellosis. Veterinariya, 25, (Jan., 1948): 18-21.]—R.E.H.

Diagnosis of Newcastle Disease

A total of 855 birds, selected from 379 flocks in which there were symptoms suggestive of Newcastle disease, was examined. Of these, 105 flocks (27.7%) yielded virus and 274 (72.3%) failed. If a larger number of birds per flock had been examined, the percentage of positive flocks probably would have increased.

The virus showed an unequal distribution in the tissues, as follows: spleens 50 per cent, ovarian yolks 42.55, respiratory exudate filtrate 31.25, oviduct egg yolks 30, brains 19.6, and pooled samples 66.6 per cent. In general, the virus was more readily recovered from young birds, and it was recovered just as readily from dead birds as from living ones.—[F. R. Beaudette, J. A. Bivins, B. R. Miller, C. B. Hudson, and J. J. Black: Studies on the Diagnosis of Newcastle Disease in New Jersey. Am. J. Vet. Res., 9, (Jan., 1948): 69-76.]

Encephalomyelitis Suum and its Treatment with Penicillin

The symptomatology, differential diagnosis, and pathology of the infectious paralysis of swine is described and discussed. In Czechoslovakia, where the disease is spreading, the author saw 6 pigs belonging to one household ill with the disease. A limited amount of penicillin was available and 2 pigs were treated with penicillin, 2-prontosil. For awhile, they seemed to improve, but within three weeks, they too, had died.—[The Cieszyn Disease (Encephalomyelitis Suum) and an Attempt of its Treatment with Penicillin. Medycyna Weterynaryjna, 3, (1947): 566.]—L.I.H.

Etiology of Swine Dysentery

Feeding the bowel discharge, or portions of the large intestine, from hogs infected with dysentery consistently reproduced the disease, while feeding of small intestine and other viscera gave negative results. The feeding of cultures of Salmonella choleraesuis produced a disease, but it was not identical with the condition which occurred naturally. In 1943, Vibrio coli was isolated in pure culture, and when this organism was mixed with gastric mucin and fed to susceptible pigs they developed dysentery.

As yet, there is no satisfactory treatment. Careful nursing, careful feeding, sanitation, and isolation are recommended, if the farmer is unable to go out of the hog business temporarily.—[L. P. Doyle: The Etiology of Swine Dysentery. Am. J. Vet. Res., 9, (Jan., 1948): 50-51.]

BOOKS AND REPORTS

Veterinary Bacteriology

This text, the first edition of which appeared in 1927, has been repeatedly revised and amplified to include newly acquired information about the bacteria, fungi, protozoa, rickettsiae, and viruses that interfere with the health of the animals to which American veterinarians minister. As with each preceding edition, this fifth of the series is a meticulous tabulation of the known facts regarding the several types of organisms capable of producing disease among animals. With each topic discussed, it lists the references to work of other authors.

The book is prepared for the student and the laboratory worker, but will prove valuable also to the practitioner interested in more than a superficial smattering of information about the agents of disease and the methods of culturing and demonstrating them.—[Manual of Veterinary Bacteriology, Fifth edition, R. A. Kelser, Philadelphia, Pa., and H. W. Schoening, Washington, D. C. Cloth, 767 pages, illustrated. Williams and Wilkins Co., Baltimore, Md. 1948, Price \$6.50.]

Methods of Vitamin Determination

This book is primarily a laboratory manual for students in the vitamin assay field. Emphasis has been placed upon the microbiological and chemical methods of vitamin determination and quantitative analysis. The biological assay methods are discussed briefly, and there is a brief outline for a series of lectures to accompany the laboratory work.

A chapter is devoted to microbiological methods and another to colorimetric and fluorometric methods of vitamin analysis, in general, and then a chapter is devoted specifically to each of 16 vitamins or vitamin fractions important in human and animal nutrition.—
[Methods of Vitamin Determination. By B. Connor Johnson, Urbana, Ill. Paper, 109 pages (8½ by 11 in.), illustrated. Burgess Publishing Co. 426 South Sixth St., Minneapolis Minn. Price \$3.00.]

Cattle Parasites

This book is a compilation of information collected in a study of the kinds of internal parasites most often found in Oklahoma cattle. Tables depict the distribution of these parasites in the several counties of the state, and the discussion provides information upon which research veterinarians can base further investigations preparatory to the formulation of a program for the control of bovine parasites.

According to this report, abomasal parasites were most common. Of the animals examined,

95 per cent harbored Ostertagia spp.; 87 per cent carried Haemonchus contortus; and Trichostrongylus spp. were found in 79 per cent. Parasites of the small intestine were reported frequently: Cooperia spp. in 84 per cent of the animals examined; Nematodirus spp. in 52 per cent; Bunostomum spp. in 23 per cent; Moniezia spp. in 30 per cent; and Ascaris spp. in 5 per cent of those examined. Parasites of the cecum and large intestine were recorded in the following order: Esophagostromum radiatum in 81 per cent of cases, Chabertia ovina in 28 per cent, and Trichuris ovis in 17 per cent of them .- [A Survey of the Gastro-intestinal Parasites of Cattle in Oklahoma, By D. E. Cooperrider, C. C. Pearson, and I. O. Kliewer. Tech. Bull. T-31, Oklahoma Agricultural Experiment Station, Stillwater. 20 p. March, 1948.]

Laboratory Animals

This is a handbook of the Universities Federation for Animal Welfare dealing with the rights of laboratory animals, the animal laboratory, and the pests of the animal house in general. It also discusses in detail the problems met in housing and using 19 laboratory animals, amphibia, and fish.

A chapter is accorded each animal, and this chapter is divided into headings for introduction, stock, accomodations and equipment, diet. handling and marking, anesthesia and euthanasia, disease and its control, and a list of references for more detailed study.

This is by all odds the most comprehensive and thorough discussion of the problems associated with maintaining colonies of experimental animals, and should be read, studied, and used as a reference book by every veterinarian who uses or supervises the use of experimental laboratory animals.—[The Care and Management of Laboratory Animals. Edited by A. N. Worden, Aberystwyth, Wales, with a foreword by T. Dalling, Weybridge, England. Cloth, 368 pages, 70 illustrations. Printed in Great Britain. The Williams and Wilkins Co., Baltimore, Md. 1947. Price \$8.50.]

Proceedings of Manitoba Association

The report of the Fifty-eighth Annual Meeting of the Veterinary Association of Manitoba, which was held in Winnipeg March 12, 1948, has been issued as a mimeographed booklet of 39 pages. All of the activities of the Association and of its several committees are presented in detail. They include reports from the president, the secretary, and the treasurer, as well as all papers presented and the discussions and deliberations of the business meeting.—[Proceeding of the Veterinary Association of Manitoba, Annual Meeting, 1948. Compiled and edited by J. M. Isa, secretary-treasurer and registrar.]

THE NEWS

Fourteenth International Veterinary Congress

London, August 9-14, 1949

Preparations for this international gathering of veterinarians, so important to the health of livestock populations and human welfare all over the world, have been under way by the Permanent Committee of the International Vet-

erinary Congress for over a year.

The greatest gathering of this kind ever held was that which took place in London in 1930, after an interval of sixteen years caused by World War I and the unsettled conditions in Europe following that war. Many will remember that the convening of the Tenth Congress in London in 1914 coincided with the outbreak of World War I and was never completed. While conditions in Europe following World War II are equally bad, or worse, the Permanent Committee feels the importance of the Congress is such that further delay in assembling it should be avoided.

It is hoped that a large number of veterinarians from North America will be in attendance at the Fourteenth Congress and enjoy the educational and vacational advantages it will provide. The 1949 convention of the American Veterinary Medical Association in Detroit will be held a month earlier than usual in order to avoid conflict with the International Congress and permit travel to the London session by many persons who will want to attend both meetings. Therefore, the date of the Detroit AVMA session was set several months ago for July 11-14, 1949. This allows 26 days between its close and the opening of the Congress in London. During this period, it has been proposed that a tour to Europe be organized, and this is being done under the directorship of Dr. D. M. Campbell, Chicago, Ill. Dr. Campbell has had much experience with European tours at the time of International Congresses and knows what the traveler from the United States wants to see abroad. Details of this tour will be announced later.

Inquiries about the Congress and the tour will be handled by the AVMA office and should be addressed to Dr. J. G. Hardenbergh, American Veterinary Medical Association, 600 S. Michigan Ave., Chicago 5, Ill., secretary of the United States Committee on the Fourteenth International Veterinary Congress. The other members of the U. S. committee, as announced in the March Journal are: Dr. G. H. Hart. University of California, Davis, chairman; Drs. A. Eichhorn, W. A. Hagan, C. C. Hastings, J. R. Mohler, B. T. Simms, H. W. Schoening, R. L. West, and Brig. Gen. J. A. McCallam, V. C.

Dr. Mohler is also a member and vice-president of the Permanent Committee.

As soon as the membership fee in the Congress has been set by the Organizing Committee in London, it will be announced so that American veterinarians can join. Also, later when the details of the European tour are known, the deposit required for transportation reservations will be announced, together with the information about tour applications. Travel to Europe next summer will be heavy, reservations by boat difficult to obtain, and arrangements must be made far in advance. Two dates for the going trip will probably be necessary, the first about the middle of July for those making the tour, and the second about the first of August for those going direct to the Congress.

PREVIOUS CONGRESSES

The first International Veterinary Congress was held at Hamburg, Germany, in 1863. It was called by Professor Gamgee of Scotland to discuss the geographic distribution of communicable diseases of animals and the means of controlling such diseases. The complete list of Congresses is as follows:

Congress	Place	Year
1st	Hamburg, Germany	1863
2nd	Vienna, Austria	1865
3rd	Zurich, Switzerland	1867
4th	Brussels, Belgium	1883
5th	Paris, France	1889
6th	Bern, Switzerland	1895
7th	Baden-Baden, Germany	1899
8th	Budapest, Hungary	1905
9th	The Hague, Holland	1909
*10th	London, England	1914
11th	London, England	1930
12th	New York, U. S. A.	1934
13th	Zurich, Switzerland	1938

Prof. L. de Blieck, of The Hague, Netherlands, is general secretary of the Permanent Committee of the Congress, and Mr. W. G. R. Oates, of London, is general secretary of the Organizing Committee for the Fourteenth Congress.

Succeeding issues of the JOURNAL will tell what the International Veterinary Congress is, what it means, how membership is obtained, etc., and will give up-to-date information on all developments of next year's session. Information will also be furnished to other veterinary

^{*}Not completed because of outbreak of World War I.

journals and to veterinary house organs so that plans for the London Congress and the tour may be widely disseminated and stimulate the greatest possible participation by American veterinarians.

Tropical Medicine Congress

The Fourth International Congresses on Tropical Medicine and Malaria were held in Washington, D. C., May 10-18, 1948. Representatives from more than 40 countries attended. In spite of the unsettled and difficult conditions in many parts of the world, the attendance was splendid and the affair was most successful.

The program for the section on Tropical Veterinary Medicine was published in the May, 1948, JOURNAL, page 410. Excellent arrangements were provided for translations in all sessions. Attendance at the sessions of the Veterinary Section was exceedingly gratifying.

Dr. I. A. Galloway, director, Virus Research Station, Pirbright, Surrey, England, was elected chairman of the section; Dr. Anacleto B. Coronel, Veterinary Research Division, Bureau of Animal Industry, Department of Agriculture and Commerce, Manila, P. I., and Dr. G. H. Bhalero, Indian Veterinary Research Institute, Itznagar, U. P. Ind., were elected vice-chairmen; and Dr. H. C. Clark, director, Gorgas Memorial Laboratory, Panama, R. de P., was named honorary chairman.

New Code of Ethics Exhibit Offered for Veterinary Meetings

A new code of ethics exhibit is now available for use at veterinary meetings, as a special AVMA service to constituent associations.

Shown for the first time at the San Francisco convention, it is a self-contained, ready-to-use exhibit that can be set up in one minute. It consists of three panels joined by hinges and mounted on legs. The extended width is 8 ft., but the side panels may be set forward on an angle so that the exhibit can be fitted into a space of as little as 4 ft. across and 3 ft. deep. The height is 6½ ft. If used in its extended length of 8 ft., it is especially adaptable for display along the wall of a hotel corridor or meeting room.

The exhibit depicts telephone directory listings and professional cards, of contrasting ethical and unethical types, and centers attention on what the individual veterinarian can do to encourage higher standards of ethics within the profession. It was prepared in consultation with the AVMA special committee on ethics.

Constituent associations interested in using this exhibit are urged to file their requests well in advance of their meeting dates—two or three months ahead if possible. Should two or more associations send requests for use of the exhibit on identical meeting dates, priority will be given to the first request received.

The AVMA will pay shipping charges to the meeting headquarters, and the using association will be asked to pay the charges for return shipment to Chicago. The total shipping weight of the exhibit is 250 lb.

Elections in Executive Board Districts II and III

Elections were completed in Districts II and III on Aug. 28, 1948. Drs. W. A. Young, A. G. Misener, and Rudolph Trader served as a board of tellers on August 30 and certified the following results.



Dr. S. F. Scheidy

In District II (Delaware, District of Columbia, Maryland, New Jersey, and Pennsylvania), Dr. S. F. Scheidy, Drexel Hill, Pa., was reelected for a five-year term ending in 1953.



Dr. O. Norling-Christensen

In District III (Illinois, Indiana, and Wisconsin), Dr. O. Norling-Christensen, Wilmette, Ill., was elected to a five-year term ending in 1953. He replaces Dr. J. L. Axby, Indianapolis, who had served on the board since 1940.

Nominating Election in District IX

A vacancy having been created in District IX (the New England states and New York) by the election of Dr. C. P. Zepp, Sr., as President-Elect of the AVMA at the San Francisco session, nominating ballots were mailed to all members in the district on Aug. 27, 1948. The polls for the nominations close October 26. The five nominees who receive the highest number of votes will be listed on an election ballot which will be mailed to members in the district about November 1.

President L. M. Hurt has named Dr. B. S. Killian, Somerville, Mass., to fill the vacancy in District IX until the election is completed.

Dr. Kingman Reports on the Milan Congress

In traveling to the First International Congress of Physiology and Pathology of Animal Artificial Reproduction and Insemination which was held in Milan, Italy, June 23 to 30, Mrs. Kingman and I flew across the Atlantic to Lisbon, Portugal, landing there on June 9, 1948. Two days were spent in Lisbon, inspecting the veterinary college, seeing the city and surrounding region. The following two days were spent in Madrid, visiting the veterinary institute, the city, and the agricultural region. There was time for a week of sight-seeing in Italy before the Congress convened, and Rome, Naples, Capri, Florence, Venice, and, finally, Milan were visited.

About 600 persons from 35 countries attended the Congress at Milan. Veterinarians were in the majority, but scientists in allied fields as well as animal husbandrymen par-

ticipated.

Dr. Raiph Phillips, Washington, D. C., served as chairman of the Congress, and other representatives from the United States were Mrs. Phillips, Dr. and Mrs. Chang of Boston, Dr. and Mrs. H. E. Kingman, and Prof. Banner Bill Morgan of Madison, Wis. Capt. B. H. Skold, V. C., who is stationed in Paris, also

was assigned to the Congress.

The meetings were divided into five sections: (1) biological problems; (2) breeding problems; (3) pathological problems of animal production; (4) methodological and practical questions of artificial insemination of animals; (5) registration and organization of problems of artificial insemination and animal reproduction. The first meetings were held at the University of Milan under the auspices of UNESCO and the Food and Agriculture Organization, of which Dr. Phillips is chairman. Sectional meetings were held at the Fair Grounds in buildings that are comparatively new and of modern design.

The attendants at the registration desk spoke not only their native Italian, but also English, French, German, and Spanish. The meetings were opened in English, and more papers were delivered in this language than in any other. Interpreters made it possible for everyone to understand each paper, no matter in what language it was presented.

While visiting an Italian farm, said to be typical, we saw hay drawn by oxen, grain harvested with a sickle, gleaners following

the reapers to gather broken heads, threshing with a flail on a concrete platform, and a small threshing machine at hand but not in use.

Following the meeting in Milan, visits were made to the universities of Berne and Zurich; to the Royal Veterinary College at Stockholm; to the agricultural area surrounding Stockholm. While in Copenhagen, we visited the Danish Royal Veterinary College, where staff members were most kind in taking us to the back countries to see farming methods and artificial insemination centers.

In addition to attending the Congress, I met the outstanding veterinarians in the several countries, conferred with specialists in the problems of reproduction and artificial insemination, and came to understand and appreciate the problems which have been met by the several authors whose works are well

known in this country.

If the politicians and the statesmen of the nations of the world could sit down and discuss their problems in the coöperative spirit displayed by various scientific groups, the world would not be in its present chaotic state.

A formal report of the Congress and of the

A formal report of the Congress and of the scientific papers presented before it will be available soon. When it is received, I will forward it to the JOURNAL.

s/H. E. KINGMAN, Cheyenne, Wyo. AVMA Representative to the Congress.

American Association for the Advancement of Science

The Centennial Celebration of the American Association for the Advancement of Science was held in Washington, D. C., on September 13 to 17, 1948. One of the 15 symposia dealt with the fundamental importance of the gene in all kinds of creatures from microörganisms to man with a discussion on how they control the blochemical, physiological, structural, and behavior properties of the organism.

Other symposia on the program included World's Natural Resources, World Health Problems, Recording of Bird Life in America, Medical Research, and Food and Nutrition.

AVMA Report

The AVMA REPORT appeared unannounced in the advertising section of the August Journal and, again, in September. The editors would like to know whether it was lost among the advertising pages (August, pp. 15 and 16, September, pp. 19 and 20, October, pp. 21, 22), or whether it has failed in its purpose to present to the members a quick survey of the numerous and diverse fields in which the AVMA is active through its elected officers, committeemen, and employees. Suggestions for deletion alteration, or movement to another section of the Journal are invited.

Adjourned AVMA Meeting

The veterinarians of the Hawaiian Islands were hosts to the group who flew from San Francisco to Honolulu in order to report the results of the Eighty-fifth Annual Meeting, and

to present a resumé of the papers which were delivered by the speakers in the several sections. The meeting was held on August 21, 1948, and the following program was presented:

Dr. E. H. Willers, Honolulu, presiding: Introductions.

Dr. J. C. Fitzgerald, Maui, T. H.: "Notes on Forty-two Years of Veterinary Practice in Hawaii.'

Dr. A. R. Miller, Washington, D. C.: "Some Aspects of Foot-and-Mouth Disease in Mexico." Dr. H. P. Noonan, Akron, Ohio: "Resumé of Papers on Surgery and Obstetrics Given at San

Francisco, and Own Experiences."

Dr. D. C. Wood, Greensburg, Ind.: "Review of Papers on General Practice, and Own Experiences."

Dr. W. E. Coffee, LaCenter, Ky.: "Views on Large Animal Restraint and Some Sidelights of General Practice.'

Dr. C. J. Noonan, White Plains, N. Y.: "Small

Animal Practice."

Dr. E. E. Jones, Los Angeles, Calif.: "Poultry

Diseases and Research."

The following films were shown at the meeting: Suturing (Farquharson); Smear Diagnosis of Cancer (Papanicoleou); and Skeletal Fixation (Stader).

Veterinarians from the territory of Hawaii who attended the adjourned AVMA Meeting were Drs. H. E. Adler, A. H. Julian, Cahill, W. F. Dorgen, J. C. Fitzgerald, G. C. Folger, J. M. Hendershot, and A. R. Glaisyer, R. H. Morrison, W. M. Pang, E. H. Willers, Col. J. F. Crosby, Major N. A. Orr, Major M. A. Ross, and Major Loveland.

In addition to the speakers, others from the United States in attendance at this meeting were Drs. O. J. Kron and F. H. Saunders, Cali-

fornia, and F. E. Button, N. M.

AVMA Research Fellows

This is the fourth in the series of discussions (see Journal July: 47; Aug.: 187; Sept.: 291) of the fellowships operating under the supervision of the Research Council of the AVMA, and a listing, in turn, of the fellows who either have completed their work or are receiving support from the Research Fund.

Following is a résumé of the background of Dr. Erskine V. Morse and the work in which he is engaged at New York State Veterinary College, Cornell University, as a research fel-

low.

Erskine V. Morse

Erskine V. Morse, born June 25, 1921; D.V.M. (1944) New York State Veterinary College; Veterinary Corps, U. S. Army three years; Assistant in bacteriology, Cornell, summer 1947; AVMA research fellow at New York State Veterinary College (July 1, 1947, probably through July, 1949).

SUMMARY OF WORK TO DATE

The cultural characteristics and biochemical activities of 45 strains of Corynebacterium renale were studied along with three strains of C. pyogenes, six strains of C. equi, eight strains of C. pseudotuberculosis, and six strains of miscellaneous diphtheroids. The study is being continued in an attempt to develop a differential medium for the members of the group.

More than 500 normal dairy cows in 17 herds have been examined and urine from these cows has been studied to determine the prevalence of C. renale infection in the territory surrounding the College. Two of these



Dr. Erskine V. Morse

herds will be reëxamined periodically. A simi-lar survey will be conducted on the bladder urine of 100 normal dairy cows presented for slaughter.

The experimental work involves the injection of various preparations of penicillin into cows known to be clinical cases of pyelonephritis, and the determination of penicillin levels in the blood and in the urine of the treated cows. Comparative or control tests are also being conducted on normal cows. Observations and check examinations are made periodically to ascertain clinical response to treatment and the effect of the antibiotic upon the persistence of infection.

Much of the survey work in connection with the research problem has been completed. Some portions are being repeated to check for accuracy of results, and some phases of the problem are being studied in greater detail.

Film on Dog Training

"Home of Champions" is a new motion picture in technicolor showing modern methods of breeding and training dogs. It was filmed at Sedgefield, a dog training farm in Mississippi, and includes a trip through the kennels, showing step by step how champion dogs are trained today. This film is being shown to any

interested group in the United States, without charge and upon request.

For details, write to Gordon M. Philpott, Ralston Purina Company, St. Louis, Mo.

STUDENT CHAPTER ACTIVITIES

Student Representatives Meet

Members of the student chapters at Alabama and Texas met with representatives of the AVMA at San Francisco and adopted the following list of objectives:

1) To form a national association of student chapters with only the essential officers

required to function.

2) To stimulate a better relationship between the AVMA and its junior chapters, and between the various junior chapters.

3) To aid the AVMA by providing more stu-

dent news for the JOURNAL.

4) To revamp student constitutions with the aid of AVMA officials, for greater uniformity.

5) The AVMA to set up, establish, and supervise the keeping of a uniform set of records by student chapters and request a complete report of each junior chapter at the annual AVMA meeting.

6) To schedule and hold a meeting of representatives of junior chapters at each AVMA

meeting.

It was the consensus of the assembled group that the AVMA and its student chapters would benefit from a closer cooperation along the following lines:

1) AVMA to sponsor an organization of

junior chapters.

AVMA officers to prepare a standard form for junior chapter records and encourage its use in all chapters.

3) Request each student chapter to send a representative to report on progress of his chapter at each annual AVMA meeting.

AVMA representative to attend a meet-4) ing of each junior chapter at least once a year. 5) Services of this junior organization be offered to AVMA officers and committees.

Those attending the meeting were Drs. J. G. Hardenbergh and R. C. Klussendorf, Chicago, Ill.; Messrs. M. R. Callihan, Frank Neville, Wiora Stewart, and J. W. Patterson, Texas A. & M College; and Robert E. Arline, Alabama Polytechnic Institute

s/R. E. ARLINE, Recorder.

APPLICATIONS

The listing of applicants conforms to the requirements of the administrative by-laws-Article X, Section 2.

First Listing

BORMAN, BEN H.

201 W. Devon, Milwaukee 11, Wis.

D.V.M., Chicago Veterinary College, 1916. Vouchers: I. G. Martin and R. C. Klussendorf.

BRADLEY, WALTER Bay Animal Clinic, 602 S. Henry St., Bay

City, Michigan. D.V.M., Michigan State College, 1938.

Vouchers: E. K. Sales and C. S. Bryan.

Buller, John J. 2095 Vestal Ct., San Leandro, Calif.

D.V.M., San Francisco Veterinary College, 1914.

Vouchers: J. McInnes and J. M. Arburua.

CHAMBERS, CHARLES H. Fremont, Nebraska.

D.V.M., Chicago Veterinary College, 1920. Vouchers: P. L. Matthews and B. G. Darling.

HOUSER, RAYMOND R. 507 C St., Broderick, Calif.

D.V.M., Kansas State College, 1914.

Vouchers: L. O. Henrich and C. W. Bower. JIMENEZ M., JOSE M.

Salvador Cisneros 236, Bauta, Havana, Cuba. D.V.M., University of Havana, 1947.

Vouchers: F. Etcheogoyhen and J. Espinosa. MOLLER, ALFRED W.

8369 Elmore, University Bldg., St. Louis, Mo. M.R.C.V.S., Royal Veterinary College, 1937. Vouchers: H. W. Steele-Bodger and I. Kraft,

STREETMAN, EDWARD G. Box 626, Nederland, Texas.

D.V.M., Texas A. & M. College, 1944. Vouchers: W. G. Brock and R. B. Wilcox.

Second Listing

Bolona R. Julio, Casilla 3814, Guayaquil, Ecuador, S. A. Buckley, Frank W., 730 E. Main St., Greens-

burg, Ind.

Donovan, John F., 77 Cedar St., Galt, Ontario,

Govea, I. Galvan, Dr. Coss Ote 26; Piedras Negras, Coah, Mexico. Isbell Jr., William J., P. O. Box 261, Langdale,

Lantz, Roy A., Woodbine, Iowa. Liebengood, Don M., 704 S. Mill St., Pontiac,

Lundberg, Fred O., Box 613, Wausa, Nebraska. McCain, Earl A., 1504 S. Saddlecreek Rd.,

Omaha 6, Neb. Martin Jr., Walter D., P. O. Box 1092, Palmyra

Rd., Albany, Ga. Riley, Emmett T., Route 2, Hobart, Oklahoma. Stanford V. Guillermo, Calle de Chopo 265, "C", Mexico, D. F.

Telford, Boswell A., Box 478, Watertown, S. Dak.

Wennergren, Oscar, 355 N. 4th East St., Logan, Utah.

Wrightman, John H., Alvinston, Ontario, Can.

First Listing

The following are graduates who have re-cently received their veterinary degrees and who have applied for AVMA membership under the provision granted in the Administrative By-Laws to members in good standing of junior chapters. Applications from this year's senior classes not received in time for listing this month will appear in later issues. An asterisk (*) after the name of a school indicates that all of this year's graduates have made application for membership.

Alabama Polytechnic Institute

1948 Graduate Applicants

POEHLMANN, NANCY LEE, D.V.M.

Warrenton, Virginia.

Vouchers: I. S. McAdory and D. S. Folse.

University of the Philippines

Noll, Donald O., D.V.M 352 Delaware Ave., Palmerton, Pa.

Vouchers: A. K. Gomez and J. L. Putnam.

PILLAI, C. PERUMAL, D.V.M.

Veterinary Research Laboratory,

Peradeniya, Ceylon. Vouchers: A. K. Gomez and J. B. Aranez.

Texas A. & M. College

McCLAIN, JR., G. D. D.V.M.

2733 Knight St., Dallas, Texas. Vouchers: W. W. Armistead and F. P. Jaggi,

Second Listing

Texas A. & M. College

Gray, Jr., Robert N., D.V.M., Box 341, Colo-

rado City, Tex.

eary, Jerome B., D.V.M., 2833 W. Seventh St., Fort Worth 7, Tex.

McCoy, Jr., Robert P., D.V.M., P. O. Box 163,

Taylor, Tex.

Roth, Earl E., D.V.M., P. O. Box 1326, Bay City, Tex.

U. S. GOVERNMENT

Veterinary Personnel Changes.—The following changes in the force of veterinarians in the U. S. BAI are reported as of Aug. 6,- 1948, by Chief B. T. Simms.

George H. Ehlers, from Salt Lake City, Utah, to Sioux City, Iowa.

Emil O. Gisel, from Bismarck, N. Dak., to

Union Stock Yards, Ill.

H. Brooks Keith, from Olympia, Wash., to Albuquerque, N. M.

Grady Wallace, from Buffalo, N. Y., to Louisville, Ky.

RESIGNED

Walter B. Bradley, Lansing, Mich. Albert Chafets, Los Angeles, Calif. Wilbur G. Clark, Philadelphia, Pa. John E. Johnson, Nashville, Tenn. Rodman L. Lancaster, Raleigh, N. Car. John K. Nagel, Denver, Colo. Justin T. Pinkerton, Mexico City, Mexico. Earl K. Spratt, Omaha, Neb. Alfred L. Stafford, Jacksonville, Fla.

William F. Hodam, Sioux City, Iowa. Joseph H. Kitzhofer, Oklahoma City, Okla. Archie N. McGregor, Chicago, Ill. Orville R. Whitney, Huron, Mich. Douglas A. Tyler, Kansas City, Kan.

Francis P. Burke, St. Paul, Minn. Wallace Williamson, South St. Paul, Minn.

Fred H. Conover, Chicago, Ill.

Map Federal-State Study of X Disease.— Representatives of 16 states met in Washington, D. C., July 26-27, 1948, to lay plans for a full-dress investigation of X disease (hyperkeratosis). The conference, attended by many veterinary leaders, was called by the U. S. BAI because the malady appears to be spreading rapidly and has been reported as the cause of serious losses among cattle in at least 26 states.

High morbidity in young animals, loss of flesh, thickening of the skin, diminished milk production, abortion, and mortality as high as 8 per cent point up the economic importance of the disease. Studies by veterinarians indicate that it is noninfectious. A tenable theory, at present, is that substances in forage or in the soil may induce it. Drug treatment has not been successful.

A resolutions committee formed at the meeting urged "immediate action to prevent further losses, and the gathering of more information by research and surveys, under guidance of the U. S. BAI, to aid states in which the disease exists." Members of the committee were Drs. H. Schmidt, Texas (chairman); A. J. Durant, Missouri; T. J. Jones, Georgia; W. B. Bell, Virginia; and C. C. Morrill, Illinois.

A decision was made to begin the initial survey in southeastern states within a few weeks.

AMONG THE STATES AND **PROVINCES**

Alabama

Charter Granted to School of Veterinary Medicine.-The national honorary society of Phi Zeta has granted a charter to the School of Veterinary Medicine, Alabama Polytechnic Institute. The Auburn Epsilon chapter was installed Aug. 13, 1948, at a dinner meeting at the Clement Hotel, Opelika, Ala., by Dr. M. W. Allam, national president, from the University of Pennsylvania, who was assisted by Dr. T. C. Fitzgerald and Dr. N. D. Crandall of Auburn, who became members at their respective alma maters.

The objects of the society of Phi Zeta are to recognize and promote scholarship and research in matters pertaining to the welfare and diseases of animals. Chapters may be formed at any accredited veterinary college or at any other institution of learning or of animal research. It is the oldest organization of its kind, the mother chapter being formed April 26, 1925, and nationalized in 1927 at Cornell University, Ithaca, N. Y.

The charter members of Epsilon chapter at Auburn feel complimented and grateful for the recognition shown them by election to Phi Zeta. This was only made possible through unanimous approval of the existing chapters throughout the United States.

The first officers of the Auburn Epsilon chapter are: Dean R. S. Sugg, president; Drs. J. E. Greene, vice-president; and A. A. Leibold, secretary. On the executive committee are Drs. N. D. Crandall, T. C. Fitzgerald, W. J. Gibbons, E. S. Winters, and Mr. T. W. Oliver.

The charter members are: faculty, Drs. W. S. Bailey, J. E. Greene, A. A. Leibold, R. S. Sugg. and E. S. Winters; students, Messrs. J. C. Ellis, J. M. Livingston, T. W. Oliver, J. W. Peace, and H. E. Purvis.

Alaska

Meat Inspection Stamp.—The territory of Alaska used a meat inspection stamp for the



Meat inspection stamp used in Alaska since Nov. 11, 1947.

first time on Nov. 11, 1947. This stamp was designed by Dr. Earl F. Graves, territorial veterinarian and resident secretary for the AVMA.

Arkansas

Quarterly Meeting.—The Arkansas Veterinary Medical Association held its second quarterly clinical meeting July, 1948, at Dr. C. D. Labahn's hospital in Fort Smith. Eleven veterinarians from Arkansas and three from Oklahoma attended. Demonstrations included application of the Kirschner splint to a fractured femur, the technique of ear trimming and of bovine artificial insemination.

The ladies were entertained by Mrs. Labahn and enjoyed the banquet with their husbands.

California

Two Awards to Dr. Hinshaw.—At the thirty-seventh annual meeting of the Poultry Science Association held at Colorado A. & M. College in June, Dr. W. R. Hinshaw (MSC '23), University of California, was awarded the Borden prize of a medal and \$1,000 for distinguished work in animal pathology and, also, the research prize of the National Poultry Federation of a plaque and \$500 for his contributions to the knowledge of turkey diseases.

Death of Rowena Wyatt Outhier.—Rowena Wyatt Outhier, wife of Dr. C. B. Outhier of Salinas, Calif., died July 25, 1948. She had lived in Salinas for the past 42 years where Dr. Outhier has practiced for 45 years.

Mrs. Outhier was an active member of the Women's Auxiliary of the California State Veterinary Medical Association. In 1930, Dr. and Mrs. Outhier attended the International Veterinary Congress in London after an extensive tour of Europe with a group of American Veterinary Medical Association members and their wives.

World's Largest Poultry Farm.—"If there is any poultry farm larger than the Runneymede Farm in San Fernando Valley," says Poultry Tribune, "someone is keeping it a dark secret." It is a 310-acre ranch, 120 acres of which contain the housing for 600,000 chickens and 260 employees. "It is not likely," continues Reporter Hartman, "that anyone will try to match Runneymede—not if he stops to figure the cost of feeding 600,000 chickens."

Georgia

Short Course.—The Georgia Coastal Plain Experiment Station presented its fourth annual short course for veterinarians at the experiment station in Tifton on Sept. 16-17, 1948. The scientific program included the following speakers:

Dr. A. H. Quin, Kansas City, Mo.: "A summary of the Swine Enteritis Problem" and "Developments in the Field of Veterinary Therapeutics."

Dr. G. R. Moore, professor of surgery, Michigan State College, East Lansing, Mich.: "Teat Operations," "The Technique of Artificial Insemination," and "Causes and Diagnosis of Infertility in Bulls."

Dr. E. E. Chambers, Rossville: "Dangers in Artificial Insemination."

Dr. E. S. Tierkle, U. S. Public Health Service, Montgomery, Ala.: "Veterinarians in Public Health Work."

Dr. T. B. Clower, chief veterinarian, Atlanta: "Proposed Changes in the Brucellosis Set-Up."
Dr. C. C. Rife, Atlanta: "Making a Diagnosis and Prognosis in Small Animals."

Dr. J. E. Peterman, pathological division, BAI, Washington, D. C.: "Swine Erysipelas—Its Differential Diagnosis."

Dr. C. W. Barber, professor of pathology, University of Georgia, Athens: "Foot-and-Mouth Disease."

The USDA X disease team presented the present status of X disease, and laboratory exercises included semen collection and evaluation, inseminating a cow, and care of equipment.

s/W. L. SIPPEL

Hawaii

Tour of Hawaii.—The following is a report from the veterinarians who flew from San Francisco to present an adjourned meeting program for the veterinarians of Hawaii:

We veterinarians who traveled on to Honolulu were amazed, surprised, and dumfounded at the glorious reception we received upon our arrival. We think hospitality is in its infancy upon the mainland. We were showered with flowers and leis, the beauty of which cannot be described. During each waking hour of the day we were wined, dined, and shown every possible courtesy imaginable. Nature was good, too, and pro-

vided a moonlight view of Waikiki, a sight never to be forgotten.

Each race of people was kind to us in the Islands. Hawaiian, Chinese, and Japanese intermingle, and one meets some charming people in each group.

Those of us who were fortunate enough to take this journey shall never forget Hawaii, and we thank the Island veterinarians and their friends who made our visit so gloriously happy and delightful. We wish them all Aloha.

Illinois

Northern Association.—The fall meeting of the Northern Illinois Veterinary Medical Association was held in the Crystal Room of the Nelson Hotel, Rockford, September 22. The following program was presented:

Dr. George Burch, Pittman Moore Co.: "New Insecticides with Special Reference to Their Toxicity in Relation to Domestic Animals."

Dr. Ed Howe, Iowa City, Iowa: "Beef Cattle ractice."

Dr. Joe Krichel, Keokuk, Iowa: "Small Anial Practice" (with illustrations).

Dr. A. G. Danks, University of Illinois Veteinary College, Urbana: "Dairy Cattle Praclee."

Dr. H. E. Held, Freeport, and Dr. E. A. Woelffer, University of Illinois, Urbana: "New X Disease in Cattle."

Guest speaker at the banquet was Mr.-L. H. Geddes, who told of some of his experiences in Europe as a representative of the Illineis Holstein Breeders Association.

The ladies enjoyed a complete and varied program. s/A. A. Legner, Secretary.

Meeting of Chicago Association.—The Chicago Veterinary Medical Association met at the Palmer House on May 11. Dr. O. Norling Christensen gave an illustrated lecture on his trip to Norway, Denmark, and Sweden, with some very fine pictures, especially of the veterinary colleges.

s/Robert C. Glover, Secretary.

Veterinary College Opens.—Twenty-four students enrolled in the freshman class of the University of Illinois College of Veterinary Medicine on September 11 to 13. This is the first time in the history of the University of Illinois that students have enrolled in the professional veterinary courses that will lead to the degree of doctor of veterinary medicine four years from now. Each student accepted has completed two years of preveterinary training and all are World War II veterans.

Two new buildings are planned for the College of Veterinary Medicine. One of them will be a basic science building; the other will house the activities of the department of veterinary clinical medicine and the diagnostic service of the College. Larger veterinary classes will be accepted when the new buildings are completed.

Dean Graham Appointed as Consultant.— Dr. Robert Graham, dean of the University of Illinois College of Veterinary Medicine, has been appointed scientific consultant to the Food and Drug Administration. In this capacity, he will deal with veterinary problems in the enforcement of the Federal Food, Drug, and Cosmetic Act.



Dr. Robert Graham

Dean Graham is the first veterinarian to be appointed a scientific consultant by the Food and Drug Administration. For several years, however, he has been cooperating with the administration in enforcing the law against misbranded veterinary medicinal preparations to protect the livestock and poultry industry of the nation. He has appeared several times as witness for the Food and Drug Administration in cases that have been successfully prosecuted. He has also made scientific tests of veterinary medicinal preparations, the results of which have been helpful in removing from the market worthless preparations sold in interestate commerce.

During 1947, Dean Graham was consulted by the administration on several cases. One product shipped in interstate commerce was sold as a medicine to prevent and treat external and internal parasites and several other diseases of poultry and other animals. When tests were made, it was found that the medicine would not kill either germs or parasites and the manufacturer was fined. In some cases, manufacturers of prepared medicines have withdrawn their products from the market before court action was taken.

Dr. Danks Appointed to Veterinary College Staff.—Dr. A. G. Danks, formerly professor of Veterinary Surgery, New York State Veterinary College, has been appointed as professor and head of the Department of Veterinary Clinical Medicine, University of Illinois College of Veterinary Medicine, Dr. Robert Graham, dean of the veterinary college, has announced.

Dr. Danks received his B.S. degree at Pennsylvania State College and his D.V.M. degree

at New York State Veterinary College, Cornell University. He taught at Kansas State College, where he was an assistant professor, and at Cornell University, where he was professor of operative, general, and clinical surgery from 1936 until his present appointment.



Dr. A. G. Danks

Besides being editor of the Cornell Veterinarian for several years, Dr. Danks has written numerous publications, the best known of which is the recent revision of "Williams' Surgical Operations."

National Meat Board Honors Two Members.—Thos. E. Wilson and R. C. Pollock, tireless workers with the Livestock and Meat Board for more than a quarter of a century, were honored at a dinner meeting for that organization at the Saddle and Sirloin Club in Chicago, June, 1948. The presentation was made by Chairman Will J. Miller. Dean H. H. Kildee of Iowa State College paid tribute to Mr. Pollock, a former student of ISC, for his distinguished achievements and Albert K. Mitchell of New Mexico reviewed the work of dynamic Thos. Wilson in the development of American agriculture.

Scottish Veterinarian Visits Veterinary College.—A luncheon honoring Dr. William Mitchell, dean of the Royal (Dick) Veterinary College, Edinburgh, Scotland, was held August 6 at the University of Illinois campus.

Dr. Mitchell, guest of the College of Veterinary Medicine, said an interchange of ideas

and students in the world of veterinary medicine would do much to bridge the gap between nations.

Great Britain is trying to produce 65 per cent of its foodstuffs locally and veterinary medicine will play an important part in that program. Dr. Mitchell said.

Dr. Mitchell has visited and studied operations of several eastern veterinary colleges, and also attended the convention of the American Veterinary Medical Association in San Francisco August 16 to 19.

S/LYLE E. ASHELFORD.

Brucella Vaccine Shows Low Viability.—Several samples of Brucella vaccine, picked up from veterinarians in the field by state BAI inspectors, showed a very low viability count. Some of these samples had as much as forty days before expiration date.

lowa

Agricultural Instructors Meet.—Some 300 instructors, who are now supervising 6,000 es G.I.'s in veterans' institutional on-farm training programs, met at Iowa State College in August for a three-day conference. Members of the staff at Iowa State College and representatives from other agencies presented lectures and discussions on various phases of farm operation, as well as methods of teaching.

East Central Society.—The East Central Iowa Veterinary Medical Society held a dinner meeting at the Hotel Roosevelt in Cedar Rapids on Sept. 9, 1948. The program consisted of case reports on poisoning of livestock by poisonous plants by Drs. L. C. Swain, Wellman; L. Proctor, Oelwein; Orlo L. Haight, Mt. Vernon; F. J. Crow, Iowa City; James D. Ramsey, Tipton; W. S. O'Brien, Ryan; R. E. Elson, Vinton; Joe W. Giffee and R. M. Hofferd, Cedar Rapids; H. E. Hanna, Springville; and H. N. Strader, Marion. Among the poisonous plants on exhibit were jimson weed, milkweed, deadly nightshade, sweet clover, hemp, Sudan grass, cockle burr, and wild cherry.

s/Orlo L. Haight. Secretary.

Dr. Barger Retires from Federal Position.—Dr. J. A. Barger, Des Moines, retired on July 31, 1948, as veterinarian in charge of the Iowa office of the federal BAI after 40 years of government service. He has worked twenty-five years in Iowa, in coöperation with Iowa State College and the state department of agriculture, in livestock disease control work. Dr. Barger has seen great progress in the control of livestock diseases. As an example, 48,000 cattle were condemned for tuberculosis in 1923 in the U. S.; in 1947, the number was only 939. The reduction in tuberculosis-infected hogs was comparable.

Dr. Barger has two inventions, an automatic cattle tagger and a tattooer, which he will soon put on the market. He believes they will be of importance in tracing disease back to the farm from which it originated and thus be an effective force in controlling disease. He

THE NEWS

is a past president of the Iowa Veterinary Medical Association, and a member of the

In the near future, Dr. and Mrs. Barger plan to make their home in Pass Christian, Miss.

District Meeting .- Veterinarians in district III met in Clay Center, July 11, 1948, with Dr. and Mrs. Maurice W. Hull and Dr. and Mrs. Frank Galley as hosts. After the business meeting, Dr. A. H. Quin discussed miscellaneous practice problems and answered questions.

The ladies were entertained at bridge and enjoyed a picnic dinner with their husbands.

Maine

Quarterly Meeting.—The regular quarterly meeting of the Maine Veterinary Medical Association was held at the Falmouth Hotel, Portland, on July 14, 1948. The program follows.

Dr. Raymond C. Snyder, secretary of the AVMA Special Committee on Ethics, Upper Darby, Pa.: "Veterinary Ethics." Dr. Snyder also showed the films "Dehorning Under Local Anesthesia," "Rables," and "Public Relations," Dr. L. B. Denton, Dover-Foxcroft: "Practi-

tioner and Client Relationship."
Dr. E. F. Schroeder, chief of staff of the Angell Memorial Hospital, Boston, Mass.: "Fractures and Dislocations."

The motion picture "Pharmacology of espiratory Stimulants" was shown through Respiratory Stimulants" the courtesy of the Ciba Pharmaceutical Com-8/S. W. STILES, Secretary. pany.

Massachusetts

Annual Meeting.-The annual meeting of the New England Veterinary Medical Association, to be held in Boston on Oct. 14-15, 1948, will be divided into two parts. The first day will be devoted to the diseases of large animals and the second day to small animal disorders. Speakers include Drs. J. L. McAuliff, Donald Baker, K. L. Bullis, Mark Allam, E. F. Schroeder, David L. Coffin, and others. The evening is to be devoted to the banquet and entertainment for veterinarians, their wives, and guests.

Members of the program committee are Drs. Cornelius Thibeault, Chairman, C. Lawrence Blakely, Gerry B. Schnelle, Todd O. Munson, Harrison B. Siegle, Wm. H. Shannon, G. A. Lester, and Mrs. J. J. Murphy.

S/HARRISON B. SIEGLE, Publicity chairman.

Michigan

Whitney Club.-The Whitney Club met in the old Post House at Evans Lake for their regular monthly meeting, July 30, 1948. Dr. W. L. Hinshaw of Adrian was host, and showed pictures of a bear hunt in Canada. Dr. W. N. Armstrong, Concord, who has been in practice 54 years, recalled for the younger practitioners some of his early experiences. On one occasion, he walked 5 mi. to treat a sick horse. It took from 8:30 a.m. to 4:30 p.m. and the farmer thought that the \$1.50 fee charged should have been \$1.00.

The next meeting will be in Concord with Dr. Armstrong as host.

s/GLEN REED, Secretary.

Minnesota

Annual Short Course .- The twenty-fifth annual short course for veterinarians will be held on Oct. 27-28, 1948, in the auditorium of the administration building at the University Farm. Some of the subjects to appear on the program are "Milk and Cream Test for Brucellosis," "Recent Developments in Swine Nutri-tion," "The Veterinarian and the United States Public Health Service," "Demonstrations on Animal Restraint," and "Problems Facing a Small Animal Practitioner." Speakers will include Drs. M. H. Roepke, E. R. Frank, R. M. Bethke, L. A. Moore, H. E. Moskey, W. L. Boyd, James H. Steele, and others. s/B. S. Pomeroy. Public Health Service," "Demonstrations on

. . . Twin City Meeting.—The summer meeting of the Twin City Veterinary Medical Society was held on Aug. 6, 1948, at the University of Min-nesota, with 40 Twin City veterinarians in at-tendance. Guest speaker, Dr. Ralph L. West of the Minnesota Livestock Sanitary Board, who recently returned from a tour of areas in Mexico as a member of a committee of the U. S. Livestock Sanitary Association, spoke on "The Foot-and-Mouth Control Program in Mexico."

The following officers were elected: Drs. George Hartle, Minneapolis, president; Fred Driver, St. Paul, first vice-president; William Andberg, Anoka, second vice-president; B. S. Pomeroy, St. Paul, secretary-treasurer.

B/B. S. Pomeroy, Secretary.

Missouri

Kansas City Association.—The regular meeting of the Kansas City Veterinary Medical Association was held in the Hotel Continen-tal on Aug. 17, 1948. The guest speaker was Dr. M. L. Furculow (M.D.) who spoke on "His-toplasmosis." Dr. Furculow is in charge of research work on histoplasmosis at the University of Kansas Medical Center in Kansas City. Dr. C. H. Anthony led the discussion. s/EARL L. MUNDELL, Secretary.

Oklahoma

Tulsa Association.—The regular monthly meeting of the Tulsa Veterinary Medical Association was held in the Hotel Tulsa on Aug. 27, 1948, at 8:00 p.m. Mr. Ernest Back, Washington County Agent, spoke on "The Relationship of the County Agent and the Veterinarian, and conducted a constructive discussion on this subject.

S/CHARLES S. GREER, Assistant Secretary.

Ontario

Veterinary Conference and Opening of the West Wing.—In connection with the formal opening of the West Wing of the Ontario Veterinary Building at Guelph, July 5 to 9, the Ontario Veterinary Medical Association in cooperation with the faculty, carried out a technical and clinical program covering the gamut of up-to-date subjects, under the direc-tion of President E. F. Johnston of the O.V.M.A., and Surgeon W. J. R. Fowler of the O.V.C., respectively. Contributors from outside the province listed on the printed program were:

W. A. Hagan, dean of the New York State Veterinary College, and president of the AVMA. G. Labelle, dean of the School of Veterinary Medicine, University of Montreal, St. Hya-

cinthe, Que.
J. A. Edgett, practitioner, West Hartford, Conn.

F. Keefe, practitioner, Lynn, Mass.

James Farquharson, professor of surgery and clinics, Colorado A. & M. College, Fort Collins, Colo.

T. H. Ferguson, practitioner, Lake Geneva, Wis.

J. T. Akins, provincial veterinarian, New Brunswick.

L. A. Gendreau, practitioner, president Q.V.M.A., Sherbrooke, Que.

H. E. Pinkerton, laboratorian, Ft. Dodge, Iowa.

A. Chambers, Regina, Sask.

C. A. Mitchell, pathologist, Animal Disease Research Institute, Hull, Que. L. A. Merillat, editor, AVMA, Chicago, Ill.

L. A. Merillat, editor, AVMA, Chicago, Ill. F. R. Beaudette, poultry pathologist, Rutgers University, N. J.

J. L. Millar, practitioner, Regina, Sask. Ronald Gwatkin, animal pathologist, Hull, Que.

E. S. Archibald, director, Dominion Experimental Farms, Ottawa.

Alfred Savage, animal pathologist, Winnipeg, Man.

R. J. Kirk, supervisor of fur farms, Regina, Sask

Jean Goudy, practitioner, Washington, D. C.



—Conference photo

Dr. T. H. Ferguson, Lake Geneva, Wis., emputating an infected digit from a steer under general anesthesia.

B. T. Simms, chief, U. S. Bureau of Animal Industry, Washington, D. C.

Mark Welsh, pathologist, Pearl River, N. Y. W. G. Stevenson, practitioner, Montreal, Que. C. E. Hagyard, practitioner, Lexington, Ky. A. G. Misener, practitioner, Chicago, Ill. C. Baker, practitioner, Montreal, Que.

J. G. Anderson, practitioner, Calgary, Alta. L. C. Ferguson, bacteriologist, Ohio State University, Columbus, Ohio.

C. P. Zepp, Sr., practitioner and presidentelect, AVMA, New York City.

Among the special features of the five-day ceremonies were a reception the evening of July 5 in MacDonald Hall; luncheon for the ladies at Hotel Conestoga followed by an automobile jaunt about Guelph, July 6; bus trip to Niagara Falls, July 7; garden party and entertainment given by the O.V.C. faculty; an evening of class reunions, July 9; and not soon forgotten was kilted A. E. Cameron leading the old timers to the opening ceremony with his pipes. Noteworthy contributions by the members of the O.V.C. staff and Ontario officials and practitioners are omitted apologetically in this contracted report.

It was no ordinary treat to meet T. C. Grenside, 91 (ONT '79), onetime prominent



—Conference photo Dr. A. Secord, Toronto small animal specialist, demonstrating the application of the Kirschner-Ehmer splint to the fractured leg of a dog.

practitioner of New York City now living in retirement at Guelph, his native town; A. E. Cameron, (ONT '08) former veterinary director general of the Dominion and longtime member of the Executive Board whom the AVMA has just honored with the Twelfth In-ternational Veterinary Congress prize; Andrew L. MacNabb (ONT '23) who left a prominent place in public health work to head his alma mater; F. W. Schofield (ONT '10), famous au-thor and teacher who tells what he knows and knows what he tells-builder of confidence in scientific veterinary literature; Ronald Gwatkin (ONT '19) and C. A. Mitchell (ONT '14) who keep the world informed on what's what in their specialized field "over there," what in their specialized neid "over there," C. P. Zepp, Sr. (CORN '19), balance wheel of the small animal clinic who will be the chief executive of the AVMA next year; A. G. Misener (ONT '38) secretary of the Illinois State association and editor of its monthly bulletin; Ed. Laitinen (ONT '16) of Connecticut, former member of the Executive Board; C. D. McGilvray (retired) (ONT '00, MCK '01), former principal of the O.V.C., recalled by

-Conference photo

Dr. James Farquharson, professor of surgery, Division of Veterinary Medicine, Colorado A. & M. College, demonstrating pyropuncture in a lame horse.

the older set as the nemesis of glanders in the Great Northwest; not to mention specialists in various branches well known to those who read.

It was hinted that the full details of the conference will be published in booklet form. They are too voluminous for the pages of the JOURNAL.

Pennsylvania

Internship Requirement for State Board Examination.—The Pennsylvania Board of Veterinary Medical Examiners has accepted the recommendations of its committee on internship so that, effective Jan. 1, 1950, applicants will be required to complete forty-eight weeks of internship as a prerequisite to taking the Pennsylvania examination for licensure. The requirements are as follows:

The Intern

The applicant for veterinary licensure shall meet all qualifications and conditions imposed by the Board of Education such as now required:

a) A pre-professional certificate.
b) Evidence of graduation from a veterinary college recognized by the Pennsylvania State Board of Veterinary Medical Examiners.

c) Letters of recommendation as to moral character, etc.

In addition the applicant will, after Jan. 1, 1950, be required to:

a) Serve one year (48 weeks) with a practitioner, hereby designated as the preceptor, or serve with two preceptors a period of twenty-four weeks each.

b) Furnish the Pennsylvania State Board of Veterinary Medical Examiners a notarized statement by the preceptor (on forms to be furnished) regarding the fulfillment of intern's duties and qualifications.

c) Furnish a complete record (compiled monthly and signed by preceptor) attesting to number and type of cases treated, the outcome, including substantiating laboratory and x-ray findings, plus postmortem findings on at least 10 per cent of mortalities.

In the event that the intern selects to serve under two preceptors, a report as indicated above must be obtained from both.

The intern must notify the Examination Board sixty days before starting his duties with a preceptor or a change of duty with another preceptor the following:

1) Name of preceptor. Address of preceptor.

Preceptor's college of graduation and year.

2) Name of applicant.

Home address of applicant.

Applicant's college of graduation and year.

In order to take proper care of those instances where a veterinarian has been in practice outside of the state of Pennsylvania and wishes to take the Pennsylvania State
Board Examination, he or she may be permitted to do so provided they can present
proper credentials testifying to the fact that he
or she has been duly licensed in the state of their practice, and has practiced the art of veterinary medicine for a period of two years following his certification as a licensed veterinarian in that state.

The term "practice" as herein used shall be construed to mean the diagnosis, treatment, medical or surgical care of sick animals.

The Preceptor

In order to be qualified as a veterinary preceptor the veterinarian must:

1) Be a graduate of a veterinary college recognized by the Pennsylvania State Board of Veterinary Medical Examiners.

2) Be duly licensed in the state of his

practice.

3) Be a citizen of good standing in his local community as regards to moral character, and conduct a practice of veterinary medicine beyond ethical reproach.

4) Have a minimum of five years' experience in the practice of veterinary medicine. (The term "practice" as herein used shall be construed to mean the diagnosis, treatment, medical or surgical care of sick animals.)
5) Maintain an adequate library including

national veterinary periodicals and other pertinent scientific literature available to the

intern.

Keep accurate records as to the num-ber and type of cases treated, the treatment given and the ultimate outcome, together with postmortem findings recorded of at least 10 per cent of mortalities.

7) Consider a preceptorship as a privilege and responsibility. He should consider the intern as a colleague rather than a source of

cheap labor for menial tasks.

8) Realize that the intern-preceptor relationship is a moral obligation binding both parties, and that dismissal for any cause may result in future hardships for both parties, in that all dismissals are subject to review by the Board of Veterinary Medical Examiners; and that interns dismissed may not be eligible to accept another internship unless approved by the Board; and that if dismissal is for just cause or action unbecoming to a member of the veterinary profession that the intern may forfeit the privilege of taking the State Board Examination for Licensure.

9) Be acceptable as a preceptor by the Pennsylvania State Board of Veterinary

Medical Examiners.

S/OTTO STADER, Ardmore, Pa.

Bucks-Motgomery Association.-The Bucks-Montgomery Veterinary Medical Association met Sept. 8, 1948, at the Moose Home in Doylestown. Dr. H. A. Milo, president of the Pennsylvania State Veterinary Association and head of the Tuberculosis Division of the state BAI, spoke on "Bovine Tuberculosis Eradication in Pennsylvania." s/J. G. SHUTE, Secretary.

. . Penn-Allegheny Association.—The regular meeting of the Penn-Allegheny Veterinary Medical Association was held on Aug. 12, 1948, at the Dairy Dell Hotel in Ebensburg. A. V. Bartenslager, School of Veterinary Medicine, University of Pennsylvania, spoke on "Swine Diseases and Management."

s/C. R. BABE, Secretary.

Wisconsin

Southeastern Association.—The July meeting of the Southeastern Wisconsin Veterinary Medical Association was held at the Linden Hotel on Big Cedar Lake near Slinger. Dr. L. W. Holm spoke on "Use and Limitations of Antibiotic Agents" and Dr. D. K. Sorensen discussed "Calf Pneumonia-Enteritis."

The August 25 meeting was held at the Park Hotel in Madison. Dr. Morgan told of his recent tour of veterinary colleges of Europe.

. .

s/J. O. McCov, Secretary.

North Central Association.—The fall meeting of the North Central Wisconsin Veterinary Medical Association was held at the Elks Club in Rice Lake on Sept. 8, 1948. The scientific program follows:

Dr. G. R. Spencer, Madison: "Mastitis." Dr. Milton Savan, Madison: "Canine Dis-

temper."

Dr. J. T. Schwab, Oconomowoc: "Chicago Brucellosis Meeting.

Dr. W. E. Petersen, University of Minne-sota, St. Paul: "Mastitis Control" and "My Recent Trip to Europe."--Dr. M. W. Fitzpatrick, Cumberland, was host

and toastmaster at the banquet.

s/J. E. McDermin, Secretary.



Ben Grotenhuis, Baldwin, points to the sewn incision in the side of the Holstein-Friesian calf that ate his overalls which were left hanging in the calf pen. The overalls contained \$245. Dr. J. R. Berggren, Baldwin, made an incision in the calf's side, opened its stomach, and extracted the overalls and wallet. The calf is now on pasture doing fine.

FOREIGN

Hog Cholera Alarming.—In an article entitled "A peste suina em Sao Paulo," D'Apice of the Institute of Biology (Biol. Abstr., March, 1948) reports that hog cholera has given rise to alarm owing to its rapid spread and to the heavy loss in three states. The virus-antiserum method employed in the U.S.A. cannot be employed because facilities for its production in sufficient quantities are lacking. the moment, even the production of crystal

violet vaccine at an industrial level is insufficient. The Institute is rendering technical aid to other laboratories to catch up with the demand. Various municipalities and large scale breeders have been requested to provide the pigs required for vaccine production.

Ceylon

New Director of Veterinary Service.—Dr. T. M. Z. Mahamooth (EDIN '38) was appointed head of the veterinary section of the Department of Agriculture in April, 1948. This was



Dr. T. M. Z. Mahamooth

part of the movement by free Ceylon to appoint Ceylonese as heads of various govern-ment departments. Dr. Mahamooth graduated from Bombay Veterinary College in India in 1928 and was later awarded a scholarship to the Royal (Dick) Veterinary College, Edinburgh, Scotland, as a result of his contribution toward the eradication of rinderpest from Ceylon. On his return, he was appointed veterinary research officer of the amalgamated Department of Agriculture, which position he held until 1944 when he was appointed acting chief of the veterinary branch of the Department of Agriculture. At this time, there was a fresh outbreak of rinderpest on the Island but Dr. Mahamooth soon had it cleared up. Because of the absence of the disease from the country since 1946, due to rigid enforcement of quarantine and the immunization of susceptible animals against the disease, it is safe to assume that Ceylon could be officially declared free of rinderpest in the near future. This will, then, be the second country in Asia to completely eradicate this disease; the first was the Philippine Islands.

Director Mahamooth, with a competent staff of research veterinarians, has planned an extensive program of animal production and efficient animal disease control, in order that Ceylon may have the best veterinary public service in southeast Asia.

Southeast Asia.

University of the Philippines, Manila.

Eire

Independent Veterinary Service.—The new spokesman of the 75-year-old Veterinary Medical Association of Ireland—The Irish Veterinary Journal—now in its second volume, and the recent founding of a veterinary faculty in the National University, Dublin, puts the veterinary service of the Irish Free State not only on an independent basis but also on the high standard Britain has been striving to attain through recommendations of the Loveday Committee that are still to be acted upon. As the friendly editor chides, while Great Britain debated, Eire created—a system of university veterinary education. The Irish Veterinary Journal is a brilliant monthly, faithful to the obligation assumed and a welcome addition to veterinary periodical literature.

Great Britain

Dr. Edwards Honored.—Dr. James Thomas Edwards has been awarded the Order of the Nile (third class) by King Farouk I of Egypt, in recognition of his services in stamping out cattle plague and for his work for the advancement of veterinary education in Egypt. Dr. Edwards first went to Egypt in 1946 as an advisor on veterinary education. It was at this time that he devised the methods, still being used, which were successful in the eradication of cattle plague in Egypt.—Vet. Rec., 28, (July 10, 1948): 343.

Another Case of Rabies.—The Ministry of Agriculture and Fisheries reports a case of rabies in an imported dog which was still in the quarantine kennels where it had been placed on its arrival from Burma in January. The animal, a Labrador bitch, appeared normal when it arrived. The first symptoms of rabies were noticed on June 14, and the dog died the next day. A postmortem examination revealed that the bitch was affected with rabies.

This was the sixth case of rabies in an imported dog since November, 1946.—Vet. Rec., 28, (July 10, 1948): 343.

India

Notable Change in the Military Service.—On Oct. 15, 1947, the remount and veterinary services of the Indian Army, which has been under the command of the British military forces since 1889, was turned over, bag, baggage, and direction, to the armies of the dominions of India and of Pakistan—60 per cent to India and 40 per cent to Pakistan. The two services were combined in 1946 and placed under the command of Brigadier E. S. W. Pratt who relinquished the command to Brigadier Mahk Gulshir Khan Noon for Pakistan and Brigadier Gurbachan Singh for India. The Pakistan Veterinary Corps has 39 officers, 64 veterinary assistant surgeons, 25 viceroy commissioned officers, and 731 enlisted men; India has, respectively, 43, 62, 19, and 661. The total personnel of the Corps for Pakistan is 861, and for India 789.

Raring to Go.—"As if released from a yoke," writes an Indian correspondent, "we, the vet-

erinarians of India and Pakistan, are planning for an era of great achievement and prosperity for our profession. The people have become conscious of our relationship to the country's food supply through the teachings of the lamented Mahatma Gandhi on 'restoring the cow to her former status.' But, all that is only a row of futile words unless backed up by those responsible for the administration of the new governments, and the veterinarian is not elbowed out of his legitimate spheres by nonveterinary groups."

[What more could be said in that many words about Problem I of the veterinary profession?—Ep.]

Nigeria

Rinderpest Vaccine.—Following publication of an item on goat virus (rinderpest) vaccine in the March Jouenal (p. 278), Dr. R. J. Simmons of Nigeria addressed the director of veterinary services in Cairo on the matter and asked for his opinion on the statements made. Following are extracts from his reply:

"The goat virus of the Nigeria strain, (the dry vaccine imported from Vom 1946) and the local goat-virus strain, obtained by serial passage of the Nigerian goat virus strain in the Egyptian goats, have been used successfully in the immunization of the cattle of Egypt with negligible losses, in contaminated and clean areas.

"This method (goat virus inoculations with the Nigerian strain) has been authorized as the official method adopted for combating cattle plague in Egypt since the end of 1946. From Jan. 22, 1946, (the date of the issuing of the first dried batch of the local goat virus from the Serum Institute, Abbassiah) until today, 3.5 million doses were prepared and about 1 million head of cattle were inoculated. The official status of losses amounted to 0.1 per

"... it has been clearly pointed out by R. Daubney in his paper (Immunization Against Rinderpest by Means of the Goat Adapted Virus 1948), presented by him at the fourth International Congresses on Tropical Medicine and Malaria at Washington, that 'Rachad failed to discriminate between cases of natural disease and reactions following vaccination with goat virus.'

"I take this opportunity to express my thanks for the Nigeria goat virus, kindly supplied to us by your laboratories in 1946, as it was the fundamental basis by which we were able to stamp out the disease."

s/R. J. SIMMONS, Director of Veterinary Services.

COMING MEETINGS

Southern Veterinary Medical Association. Annual Meeting. John Marshall Hotel, Richmond, Va. Oct. 11-13, 1948. A. A. Husman, 320 Agriculture Bidg., Raleigh, N. Car., secretary.

- U. S. Livestock Sanitary Association. Shirley Savoy Hotel, Denver, Colo., Oct. 13-15, 1948. R. A. Hendershott, 1 West State St., Trenton 8, N. J., secretary.
- Eastern Iowa Veterinary Association. Annual meeting. Hotel Montrose, Cedar Rapids, Iowa. Oct. 14-15, 1948. Laurence P. Scott, Waterloo, Iowa, secretary.
- New England Veterinary Medical Association, Annual meeting. Boston, Mass., Oct. 14-15, 1948. C. Lawrence Blakely, 180 Longwood Ave., Boston, Mass.
- University of Illinois. Annual Conference for Veterinarians. College of Veterinary Medicine, University of Illinois, Urbana, Oct. 18-21, 1948. L. E. Boley, College of Veterinary Medicine, University of Illinois, chairman.
- South Dakota Veterinary Medical Association. Annual Meeting, Carpenter Hotel, Sioux Falls, S. Dak., Oct. 21-22, 1948. R. M. Scott, 1501 S. Main Ave., Sioux Falls, S. Dak., secretary.
- International Association of Milk and Food Sanitarians. Annual meeting. Bellvue-Stratford Hotel, Philadelphia, Pa., Oct., 21-23, 1948. George A. West, 44 Marshall St., Rochester, N. Y., secretary.
- Florida State Veterinary Medical Association and the Women's Auxillary. Annual meeting. Angebilt Hotel, Orlando, Fla., Oct. 25-26, 1948. Dr. V. L. Bruns, Box 623, Williston, Fla., secretary.
- Minnesota State University. Conference on animal nutrition, Oct. 25-26, and conference for veterinarians, Oct. 27-28, 1948. University Farm on the St. Paul campus. Willard L. Boyd, Department of Agriculture, University of Minnesota, St. Paul 1, Minn.
- Pennsylvania State Veterinary Medical Association. Annual meeting. Penn Harris Hotel, Harrisburg, Oct. 27-29, 1948. Raymond C. Snyder, Walnut St. and Copley Rd., Upper Darby, Pa., secretary.
- Cornell Nutrition Conference for Feed Manufacturers, Hotel Statler, Buffalo, N. Y., Nov. 4-5, 1948. F. W. Hill, Rice Hall, Cornell University, Ithaca, N. Y.
- American Public Health Association, Boston, Mass. Nov. 8-12, 1948. R. M. Atwater, 1790 Broadway, New York City 19, N. Y., executive secretary.
- Executive Board of the American Public Health Association. Annual meeting at Boston, Mass., Nov. 8-12, 1948. Dr. Reginald M. Atwater, 1790 Broadway, New York 19, N. Y., executive secretary.
- Mississippi Valley Veterinary Medical Association. Hotel Pere Marquette, Peoria, Ill. Nov. 9-10, 1948. W. J. Angerer, Box 23, Atkinson, Ill.
- Midwest Small Animal Association. Eleventh annual meeting. Hotel Burlington, Burlington, Iowa, Nov. 18, 1948. W. H. Riser, Box 872, Evanston, Ill., secretary.
- Interstate Veterinary Medical Association. Annual meeting. Martin Hotel, Sioux City, Iowa, Nov. 18-19, 1948. H. C. Smith, 2415 W. Solway Ave., Sioux City, Iowa, secretary.

- American Society of Animal Production. Annual meeting. Sherman Hotel, Chicago, Ill., Nov. 26-27, 1948. H. M. Briggs, Oklahoma A. & M. College, Stillwater, Okla., secretary.
- Research Workers in Animal Diseases of North America, Conference of. Palmer House, Chicago, Ill., Nov. 29, 1948. Dr. W. H. Feldman, Mayo Foundation, Rochester, Minn., secretary.
- Nebraska State Veterinary Medical Association. Annual meeting. Cornhusker Hotel, Lincoln, Nebr., Dec. 8-9, 1948. L. V. Skidmore, College of Agriculture, Lincoln 1, Nebr., secretary.
- New York State Veterinary College. Annual Conference for veterinarians. Jan. 5-7, 1949. W. A. Hagan, 320 The Parkway, Ithaca, N. Y., president.
- Wisconsin Veterinary Medical Association.
 Annual meeting, Park Hotel, Madison, Wis.,
 Jan. 6-7, 1949. B. A. Beach, University of
 Wisconsin, Madison, Wis., secretary.
- Mississippi State Veterinary Medical Association. Annual meeting. Pinehurst Hotel, Laurel, Miss., Jan. 20-21, 1949. S. A. Cox, Jackson, Miss., secretary.
- Illinois State Veterinary Medical Association.
 Annual meeting. Abraham Lincoln Hotel,
 Springfield, Ill., Jan. 26-28, 1949. A. G.
 Misener, 6448 N. Clark St., Chicago 26, Ill.,
 secretary.
- American Veterinary Medical Association. Annual convention. Book-Cadillac and Statler Hotels, Detroit, Mich., July 11-14, 1949. J. G. Hardenbergh, American Veterinary Medical Association, 600 S. Michigan Ave., Chicago 5, Ill., executive secretary.
- Chicago Veterinary Medical Association. Palmer House, Chicago, Ill., the second Tuesday of each month. Robert C. Glover, 1021 Davis St., Evanston, Ill., secretary.
- Houston Veterinary Medical Association, Houston, Tex., the first Thursday of each month. Edward Lepon, Houston, Tex., secretarytreasurer.
- Keystone Veterinary Medical Association. School of Veterinary Medicine, University of Pennsylvania, Philadelphia, Pa., the fourth Wednesday of each month. Raymond C. Snyder, N. W. Cor. Walnut St. and Copley Rd., Upper Darby, Pa., secretary.
- Massachusetts Veterinary Association. Hotel Statler, Boston, Mass., the fourth Wednesday of each month. C. L. Blakely, Angell Memorial Animal Hospital, 180 Longwood Ave., Boston, Mass., secretary-treasurer.
- New York City Veterinary Medical Association. Hotel Pennsylvania, New York, N. Y., the first Wednesday of each month. C. R. Schroeder, Lederle Laboratories, Inc., Pearl River, N. Y., secretary.
- Milwaukee Veterinary Medical Association. Wisconsin Humane Society, 4150 N. Kumbolt Ave., Milwaukee, Wis., the third Tuesday of

- each month. Kenneth G. Nicholson, 2161 N. Farwell Ave., Milwaukee, Wis., secretary.
- Saint Louis District Meetings. St. Louis, Mo., the first Friday of June and November, W. C. Schofield, Dept. of Animal Pathology, Ralston-Purina Co., St. Louis 2, Mo., secretary.

Foreign Congresses

- Seventh Pacific Science Congress. New Zealand, Feb. 2-22, 1949. Mr. Harold J. Coolidge, 2101 Constitution Ave., Washington 25, D. C., executive secretary.
- Fourteenth International Veterinary Congress. London, England, Aug. 9-14, 1949.
 - General Secretary, Permanent Committee: Prof. L. de Blieck, Kwartellaan 51, The Hague, Netherlands.
 - General Secretary, Organizing Committee: Mr. W. G. R. Oates, 9 Red Lion Square, London, W. C. 1, England
 - Secretary, United States Committee: J. G. Hardenbergh, 600 S. Michigan Ave., Chicago 5, Ill.

STATE BOARD EXAMINATIONS

Virginia.—The Virginia State Board of Veterinary Examiners will hold an examination on Nov. 22 and 23, 1948, in the senate chamber, State Capitol Building. Application for examination forms must be filed with the secretary not less than thirty days prior to examination. Only graduates of accredited veterinary colleges or institutions are eligible for examination. Application forms can be obtained from the secretary, Dr. H. T. Farmer, Box 436, Richmond 3, Va.

VETERINARY MILITARY SERVICE

Active Duty Training.—Pursuant to instructions received from higher authority, effective immediately, active duty training (not extended) of Reservists will be restricted to priority types of training which are defined as follows:

- a) Duty with Staff and Faculty of Service
- Students at Service Schools, Regular, Special and Associate Course.
- c) Unit Field Training.
- d) Army Area Schools.

Remaining types of active duty training are temporarily suspended, pending determination

of over-all military commitments.

The last summer field training period is now in progress and with the exception of the special command and general staff course, all Army Area School quotas have been filled. Until further notice, only active duty training is available with service schools or command general staff course. Other applications should not be submitted or requested; however, it is

believed that the majority of applications received prior to Aug. 13, 1948, will be recognized. s/John C. Keele, Jr., Major, MSC.

BIRTHS

Dr. (UP '46) and Mrs. Donald W. Lackey, Lenoir, N. Car., announce the birth of a daughter, Elizabeth Shelton, on May 30, 1948.

To Dr. (ISC '44) and Mrs. L. J. Magnall, Tripoli, Iowa, a son, Richard Lawrence, on May 30, 1948.

To Dr. (COLO '43) and Mrs. J. E. Stacy, Sacramento, Calif., twin sons, Thomas Charles and William Frederick, June 8, 1948.

Captain (OSU '44) and Mrs. Henry M. Miller, 1819 Pershing Rd., Chicago, Ill., announce the birth of a daughter, Barbara Joanne, on June 18, 1948.

To Dr. (TEX '43) and Mrs. Joseph S. Hull, Jr., West Plains, Mo., a son, Joseph Daniel, on June 29, 1948.

To Dr. (MSC '44) and Mrs. H. S. Bryan, Urbana, Ill., twin daughters, Susan Lee and Sally Jean, on July 16, 1948.

To Dr. (OSU '35) and Mrs. Henry J. Apple, 1600 W. 5th Ave., Columbus, Ohio, a daughter, Christine Adella, on July 17, 1948. Mrs. Apple (Ph.D.) is a senior in the College of Veterinary Medicine, Ohio State University.

Dr. (ISC '45) and Mrs. A. O. H. Setzepfandt, Bird Island, Minn., announce the birth of a son, Paul Wilson, on July 20, 1948.

To Dr. (API '43) and Mrs. Joseph T. Stearns, LaGrange, Ky., a son, Joseph Brock, on Aug. 6,

To Dr. (WASH '44) and Mrs. Richard Dubigk, 516 East First St., Port Angeles, Wash., a third daughter, Candace Nedra, on Aug. 9,

Dr. (KSC '42) and Mrs. Arthur A. Case, Columbia, Mo., announce the birth of Elizabeth Pansy on Aug. 21, 1948.

Dr. (OSU '48) and Mrs. H. Lincoln Easterbrooks, Concord, N. H., announce the birth of a daughter, Cheryl Faye, on Aug. 21, 1948.

Dr. (MSC '47) and Mrs. Eugene Hanawalt, Coos Bay, Ore., announce the arrival of Richard Harry on Aug. 21, 1948.

To Dr. (COLO '41) and Mrs. Paul T. Candlin, 426 S. Park St., Madison 5, Wis., a son, Bruce Paul, on Aug. 24, 1948.

DEATHS

- B. B. Allder (KCVC '11), Stockton, Mo., died Feb. 26, 1948.
- Roy G. Baldwin (KCVC '09), Blue Rapids, Kan., died April 15, 1948, after a lingering illness. Dr. Baldwin had practiced at Centralia and Blue Caks before comits, to Blue Rapids
- and Blue Oaks before comir. to Blue Rapids. *Augustus O. Bonnell (CIN '14), 68, Cincinnati, Ohio, died June 26, 1948. Dr. Bonnell was general manager of the Kentucky-Indiana-Ohio Milk Producers Association. He was a member of the AVMA.

- Leonard G. Botkin (KCVC '12), New Point, Mo., died June 21, 1948. Dr. Botkin had retired from general practice some time ago due to ill health.
- *Malcolm M. Brown (USCVS '13), 60, Marion, Va., died June 4, 1948. Dr. Brown was admitted to the AVMA in 1937.
- Claude T. Chamberlain (KCVC '12), Riverside, Calif., died March 3, 1948.
- Willis T. Corwin (KCVC '11), Pine Island, Minn., died June 9, 1948.
- L. A. Donovan (ONT '16), St. John, N. B., Canada, died March 3, 1948.
- *Roy T. Fisher (KCVC '10), Stillwater, Okla., died May 16, 1948, Dr. Fisher was admited to the AVMA in 1927.
- John J. Fleming (SAN FRAN '14), Chico, Callf., died July 8, 1948, after a week's illness. Dr. Fleming was associated with malaria control work in the Panama Canal Zone during the presidency of Theodore Roosevelt.
- *Curtis A. Frederici (UP '21), 55, Fogelsville, Pa., died May 5, 1948. Dr. Frederici had been a member of the AVMA for 24 years.
- *Glen D. Grogan (IND '07), 64, Peoria, Ill., died Aug. 6, 1948, of a cardiac condition. After his graduation, Dr. Grogan practiced in Mendota, Ill., for twenty years and then opened a small animal hospital in Aurora, Ill. During this time, he developed several new types of small animal hospital equipment which are now widely known. At the time of his death, he was on the consulting veterinary advisory board of the Vitamineral Products Company. Dr. Grogan was admitted to the AVMA in 1919.
- Anson B. Hill (KCVC '09), Rapid City, S. Dak., died Dec. 3, 1945, after five years illness. Dr. Hill was city veterinary inspector for Rapid City at the time of his death. He had been a member of the AVMA.
- William A. Houk (CVC '17), Muscatine, Iowa, died June 18, 1948, after a long illness. Dr. Houk had been engaged in general practice.
- Robert P. Hunter (IND '15), Edinburg, Ind., died March 31, 1948.
- Harry Cooper Kutz (UP '14), Harrisburg, Pa., died May 3, 1948.
- William A. McClanahan (ISC '91), Gravette, Ark., died April, 1948. Dr. McClanahan had retired from general practice several, years before his death.
- *J. M. Mayes (KCVC '06), Kansas City, Mo., died on March 11, 1948. Dr. Mayes had retired from the BAI. He was admitted to the AVMA
- in 1918.

 Robert F. Moore (AMER '94), Laconia, N. H., died in May, 1948.
- E. E. Pearson (CVC '11), Fertile, Minn.,
- died April 18, 1948.

 Paul F. Schwarck (KCVC '17), Spencer, Iowa, died May 23, 1948.
- *Howard C. Wilson (KCVC '08), 74, Muncle, Ind., died April 16, 1948. Dr. Wilson was admitted to the AVMA in 1918.
- *Charles L. Wilhite (KCVC '07), 70, Manning, Iowa, died on July 9, 1948. Dr. Wilhite was admitted to the AVMA in 1917.

Proceedings, Eighty-Fifth Annual Meeting American Veterinary Medical Association

San Francisco — August 16-19, 1948

Business Sessions

First Session, House of Representatives August 16, 1948

The first session of the House of Representatives of the American Veterinary Medical Association, held at the Palace Hotel, San Fran-California, August 16-19, 1948, convened at 9:15 a.m., President W. A. Hagan presiding. PRESIDENT HAGAN: Gentlemen, we will we will come to order.

First will be the roll call. Dr. Klussendorf will go down the list and, when he comes to you, will you stand and give your name so that he can check as to whether you are the dele-gate or the alternate?

Dr. Klussendorf, will you call the roll?

The Roll Call

Alabama

South Dakota

Tennessee Texas

Utah

Assistant Executive Secretary Klussendorf called the states alphabetically, and the following was the result:

Delegate

I. S. McAdory John Micuda Arizona Arkansas E. F. Sheffield California Colorado W. P. Blake N. W. Pieper Connecticut Delaware Mason Weadon
J. V Knapp
Clay C. von Gremp
A. P. Schneider
C. D. VanHouweling
H. D. Carter Dist. of Columbia Florida Georgia Idaho Illinois P. O. Dorweiler
J. F. Knappenberger
Floyd M. Kearns
W. T. Oglesby Kansas Kentucky

Louisiana Maine Maryland J. D. Gadd L. A. Paquin B. J. Killham Massachusetts Michigan J. N. Campbell Minnesota Mississippi R. H. Stewart S. W. Haigler J. W. Safford Missouri Montana Nebraska O. H. Person

J. B. Key Nevada New Hampshire Geo. C. Poppensiek Tom Evans New Jersey New Mexico F. F. Fehr A. A. Husman New York North Carolina North Dakota Joseph H. Winslow F. J. Kingma C. H. Fauks Ohio Oklahoma J. O. Schnautz
R. C. Snyder
J. P. Delaplane
M. R. Blackstock Oregon Pennsylvania Rhode Island South Carolina

Ole H. Stalheim Dennis Coughlin

E. A. Grist W. E. Rasmussen

Vermont Virginia Washington West Virginia Wisconsin Wyoming Army NAFV Canal Zone Alberta British Columbia Manitoba Ontario Saskatchewan Puerto Rico

E. E. Waller I. D. Wilson P. G. MacKintosh Lucille S. Dimmerling C. R. Curtis Reuben Blackner G. W. Fitz Gerald Arthur J. Wahn Daniel Stevenson

E. H. Sproston E. F. Johnston

O. A. López-Pacheco Mario Stincer

PRESIDENT HAGAN: In addressing you in the beginning as "Gentlemen" I overlooked the fact that we have a lady delegate, for the first time. I would like to welcome her. This is something new here but we hope you will feel welcome, Dr. Dimmerling, and take an active part in the proceedings today.

Next will be the presentation of the minutes

of the last session. Dr. Hardenbergh.

Presentation of Minutes

EXECUTIVE SECRETARY HARDENBERGH: Mr. President, I present herewith the official transcript of the 1947 Session of the House of Representatives as published in the October, 1947, JOURNAL of the American Veterinary Medical Association.

PRESIDENT HAGAN: What is your pleasure with respect to the minutes?

DR. A. A. HUSMAN (N. Car.): I move their approval.

DR. I. S. McADORY (Ala.): Second the motion. PRESIDENT HAGAN: Those in favor say 'aye"; opposed "no." The "ayes" have it. It is so ordered.

Next is the report of the Executive Board by Chairman Krill.

Report of Executive Board

DR. W. R. KRILL: Members of the House of Representatives, this could be a lengthy report, if I reported everything that transpired in the meeting of the Executive Board yester-

We began our deliberations at nine o'clock, quite promptly, had one hour out for lunch, and continued in session until about seven o'clock last evening and still have a little more work to complete.

In this report from the Chairman of the Ex-ecutive Board, I am only going to give you a few matters of information and then, as we take up the various reports and other matters in the order of business, I will give you the action of the Executive Board in regard to those those matters as they come up.

CHANGE IN MEETING DATE

There is one thing, first of all, that you might be interested in. You remember last year in Cincinnati, those of you who were there, the weather was just a little bit warm, as it sometimes gets in Ohio, and there was considerable discussion and agitation about changing the date of the AVMA meeting to a time when it isn't quite so hot in the Middle West.

As a result, the various constituent associations were polled to get their reaction to changing the time of the meeting. I am sorry to say we didn't have very good returns on that poll.

Replies were received from only 27 associations and, out of that group, 16 voted for retaining the August date; 7 voted for a later date than August; 2 of them had split decisions; and 2 associations had no fixed opinion.

If your organization did not send in a reply and you wanted a change, you have nobody but yourself or your organization to blame.

So in the future, we should not hear any complaints about the time of the meeting, especially from those associations that did not reply—they just do not have much of a comeback in regard to it.

This will be published in the JOURNAL so that all the associations may know what the results of the official poll were. It appears that we must be guided by the majority, and the meeting date will continue to be some time during August, or the summer months, unless something arises to change it. If there is enough agitation, we may have another poll, at which time we may get a little better response.

You might be interested in the action of the Executive Board relative to the dates for the 1949 Meeting. As most of you know, the 1949 Meeting is to be held in Detroit, and the dates were set for July 11 to 14. Some of you may wonder why the July date instead of the usual time in August. The International Veterinary Congress is being held in London August 9 to 14, and in order to complete our meeting before the London Congress, and to give those who attend time to make connections and sail for Europe, we are holding our meeting in July.

Another thing in connection with the invitations for meetings: the meeting two years from now is to be held in Zone 3, the southern zone. We have received two invitations, one of them from Miami Beach and the other from the Texas Association, with the possibility of having the meeting either at San Antonio or Houston.

The Executive Board instructed the Central Office to investigate the facilities offered in all three places but tentatively favors the Miami Beach invitation. If facilities are acceptable and adequate at Miami Beach, we may go there in 1950. That is only a matter of information. It is not official yet, and you will be asked later to vote on a decision.

· DISPLACED VETERINARIANS

Another thing that came before the Board yesterday, that is of interest to this group, is the appeals from a great number of foreign veterinarians who want to come to this country.

One group of some 250 or 300, in a displaced persons' camp in Germany and other European countries, wanted the AVMA to take some action whereby they could come into this country, become established professionally, and live a normal life, as they put it.

We considered this matter at quite some length, including the considerable correspondence from various groups. It presents many problems. In the first place, most of the states

require that applicants for state board examination must be graduates of colleges accredited by the AVMA. We have no way of accrediting or approving the schools in Europe. Many of those schools have undergone considerable change in the last eight or ten years, during the time when some of these men graduated. Also these foreign graduates may have considerable difficulty in adapting themselves to American ways for the first few years. It would mean trying times for all concerned. We did not feel there was much we could do except to instruct Dr. Hardenbergh, when answering these letters, te tell them the difficulties that would be encountered, and that there was little the AVMA could do for them; to qualify for practice within a state is a matter over which the individual states have control, and it is not a matter for the AVMA to decide.

APPOINTMENTS TO THE RESEARCH COUNCIL

There is the matter of appointments to the Research Council which I think will be of interest to you. There are five Council members whose terms expire this year. In line with the policy of not having too great a turnover in the membership of the Research Council at any one time, we have replaced two of those members and reappointed three of them.

The two new appointments are: in Large Animal Surgery, Arthur G. Danks, New York State Veterinary College; and in Parasitology, W. E. Swales, Ouebec, Canada.

Swales, Quebec, Canada.

Those reappointed are: in Poultry Pathology,
C. A. Brandly, University of Wisconsin; in XRay, M. A. Emmerson, Iowa State College; and
for Member-at-Large, Hadleigh Marsh, Montana Agricultural Experiment Station.

I think that is all that I have to report at this time. As the various items on the agenda come up, you will be given the action of the Executive Board in connection with each. PRESIDENT HAGAN: Thank you, Dr. Krill.

PRESIDENT HAGAN: Thank you, Dr. Krill. What do you wish to do with the report just given? There are several items that require approval of this body. Do you wish to approve the report as a whole, in which case you would be approving all of the items, or do you wish to take them item by item? Some of these will, I think, come up in other connections later on, but some of them, perhaps, will not reappear unless they are handled now. For example, the appointments on the Research Council require confirmation of this body. Nominations are made by the Board of Governors, approved by the Executive Board, and confirmed by the House. So, what is your pleasure with respect to this report?

DR. P. G. MacKINTOSH (Wash.): I move the action of the Board be approved.

DR. I. S. McADORY (Ala.): Second the motion. PRESIDENT HAGAN: It has been moved and seconded that the report be approved as a whole. Are there any remarks?

DR. J. N. CAMPBELL (Minn.): There is one exception, as a matter of information, in Dr. Krill's report, and that is the changing of the date of the AVMA meeting. The Minnesota Society was not informed in sufficient time that the membership could take a vote on it. Our report is only from the members of the board of trustees. So the remark by him, that the membership would have to stand the grief on that, is wrong; the board of trustees would.

PRESIDENT HAGAN: I think that was true,

PRESIDENT HAGAN: I think that was true, Dr. Campbell, in many cases. The meeting dates of these various societies are so staggered around the year, that it takes more than a year to get word from the groups as a whole, but usually we depend upon their representatives

and expect that they will ascertain as well as possible what the wishes of their constituents are in replying. That was the consensus here.

Any further remarks?

DR. A. A. HUSMAN (N. Car.): Did I understand we had two invitations for the meeting, one to Texas and one to Miami Beach, and that the Executive Board had not decided on either place? What do you want from us? Do you want us to approve, or do you want us to agree that you be given the selection of either place, you want us to vote on either place? or do

PRESIDENT HAGAN: May I call your attention to the fact that toward the end of the agenda you will find new business, including invitations for the annual convention. This will be an item that will come up later on. DR. HUSMAN: He made the report on it, and I wanted to clear it.

PRESIDENT HAGAN: Any other questions? DR. J. D. GADD (Md.): I would like to hear more discussion on this meeting time. I know the people I saw, while in Cincinnati, felt very deeply about the meeting in August. Here we going to have a summer meeting in 1950 in the south. If so many people felt so deeply about it, I feel that it is a real problem for two years from now. Here you are passing on the action of this group. From then on it is a closed subject, isn't it?
PRESIDENT HAGAN: I suppose it can be

reactivated any time.

DR. GADD: It is better to reactivate it now rather than to pass on it.

PRESIDENT HAGAN: This is one of the items

in the report. Therefore, I will rule that it is

discussion.

DR. GADD: I understand it is the feeling of the schools that it is harder for the teachers to get out in October or in the fall, isn't that it? Isn't that one of the objections to changing it?

PRESIDENT HAGAN: That is one. I don't

know that that is the compelling one.

DR. GADD: I would like to hear some discussion about it because, frankly, the people from our section would like to see the time changed because there are few hotels that are entirely air-conditioned, and it is a real prob-

PRESIDENT HAGAN: Would anybody like to

discuss this point?

DR. DENNIS COUGHLIN (Tenn.): Mr. Chairman, that has been discussed at every meeting that I can remember, and we go along holding the meeting in August. Many will recollect the meeting in Atlanta (1932). We had delightful weather all during the week. The same thing in Memphis in 1939. Some of the hottest days I have ever spent were in Iowa, and at the Omaha convention in 1937.

So, it seems to me a matter of when we happen to get caught in the hot spell that we can complain. But it seemed to be the consensus with our group that we had better leave the meeting date as it is.

DR. HUSMAN: Mr. Chairman, just for the feeling on the subject, suppose the Chair asked all those to rise who would like to change the Let us see

date, and those who would not. L what the sentiment of the group is.

PRESIDENT HAGAN: The motion before the house is to adopt this report. We are getting house is to adopt this report. We are getting a little bit off line, but, perhaps, if you are not in sympathy with any one item, the thing to do is to turn down the motion. It might facilitate things if we had a standing vote. Suppose we be a little irregular. Those who do favor changing this date, or if you think your constituents favor it, stand up. Let's see how constituents favor it, stand up. Let's see how large a group we have. I guess there are 13 standing. I assume, then, the remainder of you are not in favor of it. To make it clear, those who are in favor of keeping the date where it is, stand up.

DR. MacKINTOSH: Keep the meeting on the West Coast where the weather is always good, and then you won't have any trouble. (Laugh-

PRESIDENT HAGAN: This vote is apparently an indication that the ballot is representative of the majority feeling. Are there any further remarks on the motion, which is that the report be adopted?

... The question was called for.... PRESIDENT HAGAN: Will those who favor the motion, which is to adopt the report, say "aye"; opposed "no." The "ayes" have it. It is so ordered.

The next item concerns several amendments to the Constitution, Administrative By-Laws, and Code of Ethics. I think you have preprints of these proposed amendments. In order that everybody will be clear about procedure, I am going to ask Dr. Klussendorf if he will read the short section with relation to procedure on amendments.

(Dr. Klussendorf read Article IX of the Con-

stitution relating to amendments.)

PRESIDENT HAGAN: There are several proposed amendments that you have before you. They were presented last year and, therefore, are coming up for second consideration. If they are passed today, they will be final. You note, though, that the Executive Board shares the responsibility with respect to these. Therefore, I will ask the Chairman to report on the Ex-ecutive Board's action on these amendments.

PROPOSED AMENDMENTS TO CONSTITU-TION, ADMINISTRATIVE BY-LAWS, AND CODE OF ETHICS

DR. W. R. KRILL: The amendments as listed have been taken up by the Executive Board and have been approved.

PRESIDENT HAGAN: That means, therefore, that these matters are now up for final consideration. If you approve them today, and the Executive Board already has given its approval, then they will become effective, according to

the Constitutional provisions just read. Since there are several of these, I think per-haps we had better take them one at a time. These are rather long to read, and I see no particular point in reading them, as long as you have them before you.

What is your pleasure with respect to Proposal No. 1?

PROPOSAL NO. 1

Amend Article III, Paragraph (b) of the Con-

stitution, to read:

The general membership, otherwise known as the active membership, shall consist of (1) graduates of veterinary colleges approved by the Association who are members of their respective constituent associations and who have been duly elected in the manner here-inafter provided, and (2) other graduate veterinarians duly elected in the manner provided by the By-Laws, who live in countries outside of the United States and the Dominion of Canada and who are otherwise eligible but do not or could not hold membership in a constituent association.

Amend Article IV, Section 1 of the Constitution to read as follows:

State, territorial, and provincial veterinary associations of North America, The National Association of Federal Veterinarians, and such ether official associations as may here-after become organized in conformity with the general plan of the American Veterinary

Medical Association, and which have adopted the same qualifications for membership, shall be recognized upon application as constituent associations provided such application is approved by a majority vote of the Executive Board.

Amend Article X, Section 2 (a) of the By-Laws as follows: Drop the last sentence and replace with the following:

The application from a member of a constituent association shall contain the certificate of its secretary that the applicant is a member in good standing of that body. In the case of an application from a veterious contains a state of the second standing of the second standing of the second seco narian residing outside the United States and the Dominion of Canada, it shall contain the endorsement of two members who know the applicant, one or preferably both of whom shall live in the same country as the applicant.

The American Veterinary Medical Association reserves the right to reject the application of any member of any constituent association.

Replace paragraph (b) of Section 3, Article X, as follows:

Members who have been dropped constituent associations shall be dropped from the American Veterinary Medical Association on official notification by the secretary of the constituent association and shall be reinstated in the same manner. Whenever a member of this Association is dropped for any reason, the secretary of the constituent association in which he holds membershhip shall be notified promptly.

Replace Section 4 of Article X with the following:

The applications of candidates who reside outside the jurisdiction of constituent asso-clations shall be submitted to the Executive Board and shall be accepted or rejected by that body at any regular or special meeting. These members shall have all of the rights and privileges and be subjected to the same obligations as other active members except only that they are not required to maintain membership in a constituent association.

DR. DENNIS COUGHLIN (Tenn.): I move the adoption.

DR. I. S. McADORY (Ala.): Second the motion

DR. C. D. VAN HOUWELING (III.): Second the motion.

PRESIDENT HAGAN: It has been moved by Dr. Coughlin, and Dr. Van Houweling and Dr. McAdory both seconded it, that this amendment be adopted. The matter is open for discussion.

DR. P. G. MacKINTOSH (Wash.): I would like to ask if, in the meeting of the Executive Board, there were any arguments for any of these proposals, or did they pass them as is. Should we go into any of these particular pro-posals other than the way you worked them over at your Board meeting yesterday? In other words, was there any controversy in regard to any of these proposals?

PRESIDENT HAGAN: Dr. Krill will answer that question.

DR. W. R. KRILL: I might say these were all argued out thoroughly a year ago at the time they were presented. As in any proposal of they we. there is considerable discussion, and it would be difficult for me to recall all the discussion that took place at that time. But they were approved by the Executive Board and recommended to this body for adoption.

PRESIDENT HAGAN: Any further discussion or questions? Are you ready to vote? I will ask you to vote on Proposal No. 1. Those who favor the motion that this proposal be adopted will say "aye"; opposed "no." The "ayes" have It is so ordered.

it. It is so ordered.

We will go to Proposal No. 2. What is your wish with respect to this?

PROPOSAL No. 2

Amend Article X, Section 3(c) to read:

Dues shall be \$10.00 a year, of which \$4.00 is for payment of one year's subscription to the official JOURNAL of the Association. Dues are payable in advance on January 1 of each year.

Amend Article X, Section 3(d) by striking it "\$7.00" and substituting "\$10.00" in the third line.

Amend the schedule in the same paragraph for the amounts to be remitted each month, in line with the increase in dues provided by the

January15.00	July
February14.17	August 9.16
March	September 8.33
April	October 7.50
May	November 6.66
June	December 5.83

Amend the last paragraph of Section 3(d) to read as follows:

Of the annual dues of \$10.00, \$4.00 is to be credited as subscription to the JOURNAL. DR. DENNIS COUGHLIN (Tenn.): I move its adoption.

adoption.

DR. J. V. KNAPP (Fla.): Second the motion.

PRESIDENT HAGAN: Any discussion?

DR. JOHN MICUDA (Ariz.): I noticed that
the proposed increase is from \$7 to \$10 for the
membership and the JOURNAL. Then below,
from January following through the year it is to be decreased each month. I notice we have \$15 for January. Is that for the Research I notice we have Journal, also?

PRESIDENT HAGAN: I will ask the Secretary to answer that question.

EXECUTIVE SECRETARY HARDENBERGH: That \$15 includes the \$5 membership fee which an applicant pays when he first applies for membership, and after that he doesn't, of nemership, and after that he doesn't, or course, have to pay the \$5 each year. A junior chapter member, Dr. Micuda, comes into the Association at a special rate. In other words, he simply pays the prorated amount in the month in which he joins. The student chapter members, in other words, do not pay a membership fee.

DR. MICUDA: In other words, it is a \$5 initiation fee?

EXECUTIVE SECRETARY HARDENBERGH: That is right.

DR. J. V. KNAPP (Fla.): Mr. Chairman, there is some discussion here about how the con-stituent associations feel. I wonder if there is any way to vote to show how the various states do feel on this question.

PRESIDENT HAGAN: Dr. Knapp, we are discussing the increase in dues.

DR. KNAPP: No, I am discussing the motion on the adoption. I wasn't discussing-

PRESIDENT HAGAN: I wonder, are you thinking about the affiliation matter?

DR. KNAPP: That is right.

PRESIDENT HAGAN: That has just been adopted.

DR. KNAPP: Well, that is true, but it arose following mention of dues. Want me to sit

down and get up again?
PRESIDENT HAGAN: The motion before the
house at the present time is with respect te
Proposal No. 2. So, I will have to rule you out of order. You can rise later, if you want to.

DR. KNAPP: Thank you.

PRESIDENT HAGAN: Any further discussion on Proposal No. 2?

. The question was called for.

DR. R. C. SNYDER (Pa.): May I ask one question? Has there been any discussion as to increasing the dues above \$10? We wonder in Pennsylvania how the AVMA can run a national association on such a small amount. Some of the state organizations have to charge more than that. We wonder how our executive more than that. We wonder how our executive officers do such a good job on so little money. If we are going to increase it, why not increase it where it belongs, rather than just \$3?

PRESIDENT HAGAN: That matter has been discussed pretty thoroughly, Dr. Snyder. It was the desire of the officers and the Exceptive Roard was presented by the continue of the continue

ecutive Board, so far as possible, to keep the price down as low as it could be done and still meet our budgetary needs. We will present later today a budget which is balanced as of the moment. That does not mean at some fu-ture date we may not have to come back for more; we hope not. So, it has been discussed. Any further questions?

... The question was called for....
PRESIDENT HAGAN: The question has been called for. Will those who favor this motion say "aye"; opposed "no." Proposal No. question has 2 has been adopted.

PROPOSAL NO. 3

Amend Article IX, Section 4 to read as fol-

Tenure: Members of the House are elected for four years, which means that they shall serve during four consecutive annual sessions of the Association, except that in the begin-ning, approximately half of the constituent groups shall be designated by the Executive Board to elect for an initial two-year term in order that all terms of office will not terminate at one time.

DR. A. A. HUSMAN (N. Car.): I move its adoption.

DR. DENNIS COUGHLIN (Tenn.): Second it. PRESIDENT HAGAN: Any discussion on its? We assumed you would all be in favor

of this one.

DR. I. D. WILSON (Va.): I think it would be very poor taste for this body to vote this resolution, in view of the deficit. Furthermore, I do not believe that it will accomplish what it is anticipated to accomplish. I do not believe that it will result in the membership of the House being more stabilized. I think it will result in its being less stabilized, that the constituent associations will regard this as a favor to be bestowed upon certain individuals, that it will be passed from member to member, and that the members of the House of Representatives will be selected on the basis of favors that have been earned in the association and not upon their interest or knowledge of AVMA affairs. I hope, there-

fore, that this matter will be rejected.
DR. A. A. HUSMAN (N. Car.): Mr. Chairman, Wilson. do not agree with Dr. (Laughter.) I feel perfectly satisfied that we would have had no such attendance as we have here today if they had not anticipated that.

As one individual that has represented North Carolina in every meeting of this body since it was organized in 1933, at my own expense because our association never had enough money In the treasury to pay me anything, I believe that this is a proper move, because there are a number of associations that are in the same financial position the North Carolina Associa-tion was in for many years.

I believe it will help, when we meet in out-

lying districts, to guarantee enough members present, as they are present here today to transact the business of this Association.

In view of the fact that we are going to raise the dues and, if we find it necessary, to raise them again, I think the amount expended in this manner is insignificant. I believe it will be beneficial.

Wilson says, membership might be As Dr. Wilson says, membership m bestowed upon some individuals who know as much about the American Veterinary Medical Association as they should, but usually those individuals who are active enough to get the vote of that body are active in such a man-ner that they will be a credit to the AVMA. PRESIDENT HAGAN: May I call your atten-

tion to the fact that the amendment is on the back of the sheet? It is the amendment of Article IX which calls for a four-year term. We are not discussing the matter of expenses. That is a matter that has been approved, and that is within the authority of the Executive Board. So, we are discussing now the question of the four-year term rather than the shorter

term. I just wanted to make that clear, Any further discussion? DR. E. F. SHEFFIELD (Calif.): Mr. C man, our association instructed me to o Mr. Chairto this on this ground: They feel that the sociations more remote from the place of the annual AVMA meeting will not always be able to send the same man, for various reasons. He cannot leave his practice, he cannot take long trips, and so on, as California will have to do to go to Maine or to Florida; whether California will ever go to Florida, I don't know. (Laughter.)

We feel that, if a man is elected for four years, he is going to have to send a substitute anyhow, if our association is to have representation. Also, if a man is elected for four years tation. tation. Also, if a man is elected for four years and he does a poor job and they want to get rid of him, which they will probably want to do tomorrow in my case, they cannot legally do it. If a man is going to the Association meetings and is capable, he can be reappointed. We feel that a four-year term is too long to be mandatory. We would like to have it left at a two-year term and leave it to the discretion of the association to reappoint the man.

tion of the association to reappoint the man.
PRESIDENT HAGAN: I would like to call
your attention to the fact that some Florida people came here. So, you ought to go to Florida.

SHEFFIELD: They may not go back, nough. (Laughter.)
DR. TOM EVANS (N. M.): We have a very though.

small association in New Mexico, and I feel that this term is too long.

I have for the last three years been certified to come to this Association. I made it this year. I know if I were elected for four years, there would be times when I could not make it We have one delegate. It is not possible to have the same man there, because we are not all available to go. We do not have many people.

We are fairly central. We have to travel at least 1,200 miles to get to some meetings. They have all been scheduled just about that far from us. We cannot always be away that long. I know that with us it was not a ques-tion of quarreling over who would come or who wanted to; it was who was going? I think that electing a man for four years

is a burden for any part of the country. I would not want it for four years. That is my personal reaction to it.

DR. P. G. MacKINTOSH (Wash.): I really think this four-year proposition is a very good idea. This is my first year here. I do not know too much about what is going on, or what

is going to happen, but in the course of four years I think a man should be more good to his home association and to the national association through the experience and the edu-cation he has in those years. Therefore, I am in favor of a four-year term.

In answer to Dr. Evans' suggestion, they always appoint a delegate and an alternate dele-So, if the delegate is not able to go, the nate will fill in anyway. gate.

alternate will fill in anyway.

DR. J. N. CAMPBELL (Minn.): My association has instructed me to vote "no" to this proposal. In the first place, they do not like this subsidizing. That is what they call this amount of money you are paying for a delegate to come one way. They mince no words about it.

In the second place, they want as many of the veterinarians of Minnesota to be delegates this House of Representatives as possible. Having a delegate for a four-year term and only one delegate from the state does not pass

that around very much.

We feel that any veterinarian in Minnesota is amply able to take care of himself politically. I am expressing the sentiments of our associa-They want these veterinarians to come and see the workings of this House of Representatives and of the AVMA, and they do not

think it is possible with a four-year term. DR. GEO. C. POPPENSIEK (N. J.): Just to add weight to the comments expressed by the delegates from New Mexico, California, and Minnesota, the state of New Jersey feels rather strongly that the tenure of office is too long, to extend it to four years, and it should be shorter than that, preferably two years.

DR. C. D. VAN HOUWELING (Ill.): The

executive board of the Illinois State Veterinary Medical Association considered this and is very strongly in favor of it, for this reason: feel that any group such as this, to be active and to be really representative of the associacions that they represent, must have at the meetings a man who is well informed; and a man cannot go one year and pick up from there what has gone on before. I think they are actually considering paying the other half of his expenses, to be sure the man will be able to come for succeeding years, and in that way carry on continued representation from Illi-nois. We know we have the Illinois state association represented, when we go to the AVMA. In our case this year, I am about fourth or fifth choice, and it is not good. I did not know anything that happened last year. Last year, I believe our duly elected delegate

was not able to go.

We think that the executive board of the state association will probably go ahead and work into the Constitution and By-Laws some arrangement for continued representation of one of the officers well acquainted with the state association activities and that he can be informed on the national association's activities.

DR. B. J. KILLHAM (Mich.): Am I correct in assuming that we are merely considering

e tenure of office?
PRESIDENT HAGAN: That is correct, sir.
DR. KILLHAM: And just considering it in connection with the action of the Board regard-ing the expenses? We have not polled our ing the expenses? We have not polled our association but I believe they would be in favor of the four-year term. I have been coming here at intervals for a number of years, but do not know too much about it yet. I think a man having an opportunity to come here for four years would learn much about the operation of the Association. If he cannot come, he always has an alternate to take his place.

DR. P. O. DORWEILER (Iowa): I have in-

structions from my executive board that I am supposed to vote for this, for they feel that a man is not up on his toes or not up to what goes on, if he is just here for one or two years at a time. Therefore, they prefer the four-year

DR. C. H. FAUKS (Okla.): I came here uninstructed by my association on this, but I am in favor of the four-year term, for the reason that I believe it takes a man three or four years to familiarity. four years to familiar workings of this body. familiarize himself with the

association has agreed to pay one-half the expense of the delegate's trip to the

conventions hereafter.

PRESIDENT HAGAN: Would anybody else

like to express an opinion?

DR. J. O. SCHNAUTZ (Ore.): Several years ago a resolution was passed that we would have a permanent member. This permanent member has gone for a number of years. He sometimes could not go, so I have gone the last two years. We feel that a member should go a number of years, to be able to carry on, and I am glad to be here the second year. am sure I can listen a little bit better than last year.

DR. O. A. LOPEZ-PACHECO (P. R.): I have been instructed by the executive board of our association to vote in the affirmative on this proposal, because they are of the opinion that it takes at least four years for a man to be ready and to be informed on all the business that is transacted in the House of Representatives of the Association.

PRESIDENT HAGAN: Would anybody else

like to speak?

DR. E. A. GRIST (Texas): I will have to get my two bits in: Dr. Hendershott is not here. We miss him today.

The four-year term, as I see it in this proposal, does not necessarily confine the state to the same man for four years. I know in our state, if he does not do satisfactorily one year, they will fire him, and anybody can be fired.

I do not see that the four-year proposal necessitates a great deal of argument. I think it would be a nice policy if it could be followed, and I imagine, if it is approved here, we will follow it as closely as possible. But no man will be allowed to come up here four straight years if we do not like him.

This happens to be about my fourth or fifth time, and I know that I know nothing of the procedures as yet. That is the reason I ask

questions.

The association with the various members here has been well worth while to activities in our state organization. Whether we got much out of the actual meetings or not makes very little difference.

Through Dr. Snyder and our friend from Puerto Rico, and some of the others, the contacts we have made in the four-year term has been well worth if to the state organization.

I, for one, am in favor of the four-year term. . The question was called for. .

PRESIDENT HAGAN: The question is being called for, but I don't want to shut off discussion. If you are ready to vote, I will ask you to vote on the motion, which is that Proposal No. 3 be adopted.

Will those in favor of this motion say "aye"; those opposed "no." I will rule that the "ayes" in other words, that the amendment have it;

is adopted.

DR. J. F. KNAPPENBERGER (Kan.): I rise to a point of order. Are the states allowed a different number of votes? PRESIDENT HAGAN: I will rule that, in

the future, when request is made, the roll will

be called and we will have a weighted vote. If a point of order is called, you can appeal from the decision of the Chair, if you wish to

DR. KNAPPENBERGER: I thought maybe ome of the other fellows might contest that. PRESIDENT HAGAN: They have the privi-

DR. E. F. SHEFFIELD (Calif.); I would like to see that vote polled. PRESIDENT HAGAN: The Doctor appeals from the decision of the Chair, which means,

then, that we will proceed to call the roll.

The Secretary will call the roll and, as he calls the roll of states, the one voting will vote "yes" or "no." We have a tabulated sheet here which gives the value of each vote. When it is finished, we will have to add them up and see what the weighted vote is.

Dr. Klussendorf called the roll, and the vote

as as follows:

was as follows:			
State No	Voting	Yes	No
Alabama		x	
Arizona		x	
Arkansas	x		
California			- X
Colorado		x	
Connecticut		x	
Delaware	x		
Dist. of Columbi		x	
Florida		x	
Georgia		x	
Idaho		×	
Illinois		x	
Indiana.		x	
Iowa		x	100
Kansas		x	
Kentucky		x	
Louisiana		x	
Maine	X		
Maryland		X	
Massachusetts		X	
Michigan		x	
Minnesota			x
Mississippi		X	-
Missouri		x	
Montana		x	
Nebraska		x	
Nevada		-	×
New Hampshire	x		~
New Jersey			x
New Mexico			x
New York		x	-
North Carolina		x	
North Dakota		-	x
Ohio		· x	-
Oklahoma		x	
Oregon		x	
Pennsylvania		×	
Rhode Island		x	
South Carolina			x
South Dakota		x	_
Tennessee		x	
Texas		x	
Utah		-	x
Vermont		x	~
Virginia			x
Washington		x	~
West Virginia		X	
Wisconsin		x	
Wyoming		^	x
Army			x
NAFV	0	x	
Alberta	x	^	
British Columbia	-	x	
Manitoba	x		
Ontario .			x
Saskatchewan	x		A
Canal Zone		x	
Puerto Rico		X X	
Cuba		A	
- mud			х

TRESIDENT HAGAN: The vote has been tabulated on Proposal No. 3. I will ask the Secretary to read the results.

DR. KLUSSENDORF: 347

DR. KLUSSENDORF: Mr. Chairman, on Proposal No. 3, 135 votes were cast; 11 not voting. Of the 135, 100 are "aye" and 35 are

'nay." PRESIDENT HAGAN: On the basis of the vote, therefore, I declare Proposal No. 3 has been adopted. What is your pleasure with respect to this Proposal No. 4?

PROPOSAL NO. 4

Amend Article II, Section 2 .- Duties of the president by deleting "and at all sessions of the House of Representatives."

Amend Article III, Section 2, relating to the duties of the president-elect by adding the following paragraph to follow the present first paragraph:

He shall preside at all sessions of the House of Representatives and shall, if desired, present to the House his program for the coming year.

DR. DENNIS COUGHLIN (Tenn.): I move its adoption.

DR. I. S. McADORY (Ala.): Second the mo-

tion. PRESIDENT HAGAN: The matter is open

for discussion.

PRESIDENT HAGAN: There seems no discussion. Will those who favor the mo-tion say "aye"; opposed "no." The "ayes" have it. Proposal No. 4 is adopted. Proposal No. 5. What is your pleasure with

Proposal No. 5. respect to this one?

PROPOSAL NO. 5

It is proposed to amend Paragraph 7 of the Code of Ethics by adding the following new sub-paragraph g):

g) No member shall willfully place his professional knowledge, attainments, or services at the disposal of any lay body, organization, at the disposal or any lay body, organization, group or individual, by whatever name called, or however organized, for the purpose of encouraging unqualified groups and individuals to diagnose and prescribe for the all-ments and diseases of animals. Such conduct is especially reprehensible when it is done to promote commercial interests and monetary gain. Such deportment is beneath the dignity of professional ethics and practice; it can be harmful to both the welfare of the animalowning public and the veterinary profession; it violates principles of humane animal care; it may cause great economic loss and en-danger public health and is, therefore, contrary to sound public policy.

DR. A. A. HUSMAN (N. Car.): I move its adoption.

DR. J. F. KNAPPENBERGER (Kan.): Secand it.

PRESIDENT HAGAN: Moved and seconded that Proposal No. 5 be adopted. Discussion on

DR. E. F. SHEFFIELD (Calif.): I have been instructed thus on this proposal: My association feels that a great many men will be affected by this. We did not have an attorney present for the actual interpretation, but they feel that any lay body might include humane associations, agricultural colleges, and similar associations, agricultural colleges, and similar organizations who hire veterinarians on a payroll basis. They wonder if a veterinarian working for a humane society will not be embarrassed by this. Maybe the spirit of it is all right, but the reading of it seems to infer he cannot be employed thus. I would like to be enlightened on that point, please.

PRESIDENT HAGAN: Dr Krill, would you

like to speak to that point?

DR. W. R. KRILL: I think, if you will read on down through the proposal there, it says "for the purpose of encouraging unqualified groups and individuals to diagnose and pre-scribe for the ailments and diseases of animals." I think that takes care of it. I do not think that that would involve the humane societies, or organizations of that kind. I think that takes care of it very nicely.

T. OGLESBY (La.): I would like ask Dr. Hardenbergh if the wording of at hasn't been changed since last year?

EXECUTIVE SECRETARY HARDENBERGH: No, we wouldn't dare change it because this was submitted a year ago. I think if you go back to your October 1947 JOURNAL, you will find the

nd the exact wording: PRESIDENT HAGAN: I think it is true this underwent a lot of revision before it was presented. The committee of the Board went over it. It is a very difficult thing to write something of this sort that will accomplish what is wanted, without causing embarrassment.

DR. OGLESBY: I don't know how to handle the king's English. As it reads here, it would be O.K.; the men would not be trapped.

PRESIDENT HAGAN: As Dr. Krill said, it is the feeling of the Board that it is worded in such a way it will not cause them embarrassment; we hope not, at any rate. That is up to this group to decide. Any further discoveries cussion?

DR. GEO. C. POPPENSIEK (N. J.): The executive board of the New Jersey Association asked me to raise one question about this proposal. We are, of course, in absolute agree-ment with it. We in the state of New Jersey have the same code of ethics as the American Veterinary Medical Association, as do a num-ber of the other states. But the question that

came up has been one of legal obligation.

If a member of the Association violates the of Ethics and is consequently expelled from the Association, quite naturally we would feel a moral obligation in the state to follow through on the same lines, but are we obligated legally, as a constituent association, to follow through with the proposal? That was the only question. There is some question about state's rights; I am not too familiar with it.

DR. KRILL: This governs the national association, merely as part of the Code of Ethics that we expect of our constituent members. The chances are your association would want to have a similar code of ethics, or would follow somewhat along the same lines. Whether or not it is necessary for you to

r or not it is necessary to that individual, that is entirely a that is entirely a state's opportunity to do as they see fit. We do not enter into that kind of thing whatsoever. This is merely a Code of Ethics that we expect of our membership.

PRESIDENT HAGAN: Any other discussion? DR. C. D. VAN HOUWELING (III.): Mr. Chairman, just to be sure that you don't think Illinois people are all yes-men, this was discussed for some time before the executive board of the Illinois State Veterinary Medical Association.

I would like to explain it isn't my personal feeling at all, but it is the official action of that group that I am instructed to vote unless this proposed change is qualified in some way. They felt that it was too inclu-sive as it is written here, that too many men who would maybe be rendering a service to the veterinary profession could be prosecuted or be brought up before the Executive Board or have their membership cancelled, as this is worded and stated in this paragraph.

I do not feel qualified to change the wording, and they did not give me any suggestions, but they feel that some of our extension veterinarians and others who are called upon to talk to farm audiences and livestock men, are sometimes placed in a position where they have to almost diagnose and prescribe for some of these animal ailments. If a group in a state decided to get a man on that basis, they could go out and probably try to get him, and maybe his membership would not be canand maybe his membership would be executive celled when it was considered by the Executive Board but some men who have quite a little board but some take the attitude, "If you pride would just take the attitude, "If you don't like it, it is too bad. I will just cancel my membership voluntarily and drop out for that reason.'

As I said before, that is not my personal opinion; it is the opinion of the officers of the Illinois Association, and I am instructed ty vote "no" unless it is qualified to a certain

PRESIDENT HAGAN: As far as this qualifi-cation is concerned, that cannot be done at You have to adopt it, or turn it this time. down.

May I inject a DR. B. J. KILLHAM (Mich.): word, as an extension veterinarian? Dr. Krill is absolutely right. It says here "for the purpose of encouraging unqualified groups and individuals to diagnose and prescribe." Ex-

tension veterinarians do not do that.

PRESIDENT HAGAN: Anybody else wish to speak?

.. The question was called for. The question was called for.... PRESIDENT HAGAN: I am asking you now to vote on Proposal No. 5. The motion is that it be adopted. Will those who favor this motion say "aye"; opposed "no." The "ayes" have it. The proposal, therefore, is adopted. Next we come to Proposal No. 6. What is your pleasure with respect to this?

PROPOSAL No. 6

It is proposed to add the following new sub-head to the Code of Ethics following present Paragraph 31, and to number it Paragraph 31 as follows:

Pharmacists

Paragraph 32.—Licensed pharmacists should be recognised by members of the veterinary profession and their services should be utilized; but any pharmacist, unless he also be qualified as a veterinarian, who assumes to diagnose and prescribe for sick animals or for the handling of contagious and infectious diseases of animals, should be denied such recognition and support, since his activities may be viewed as prejudicial to the public interest, contrary to laws governing veterinary medical practice, and in violation of state and federal laws made and provided for the control of animal diseases.

If adopted, present Paragraphs 32 and 33 would be re-numbered 33 and 34, respectively. DR. DENNIS COUGHLIN (Tenn.): I move

its adoption. DR. I. S. McADORY (Ala.): Second the motion.

PRESIDENT HAGAN: The matter is before ou. Any discussion? There being no disyou. Any discussion? There being no discussion, will those in favor of this motion to adopt Proposal 6 say "aye"; opposed "no." The "ayes" have it. It has been adopted. Proposal No. 7 is now before you. What is your pleasure? vou.

your pleasure?

Amend paragraph (e) of Section 1, Article XIV, Administrative By-Laws, by changing the

words "Sanitary Science and Food Hygiene" to "Public Health.

DR. JOHN MICUDA (Ariz.): I move that it

he adopted.

DR. F. F. FEHR (N. Y.): Second the Second the motion. open for discussion. If there is no discussion, I will ask you to vote. Those who favor this motion that Proposal No. 7 be adopted will say "aye"; opposed "no." The "ayes" have it, and is adopted.

We have another proposal for an amendment that will be presented to you now, for first reading, by the Executive Board. Dr. Krill

will read it.

DR. KRILL: How many of you have your Constitution and By-Laws with you? We will read two articles. In Article VI of the Constitution, Section 3, you will find this statement:

The House of Representatives is, in principle, the voice of the active members. shall approve or disapprove all matters presented to it by the Executive Board. Its vote, carried out in accordance with customary parliamentary procedure, shall be final. Mat-ters originating in the House, or presented to it by authorized committees, or by any of the regular sections of the Association, shall be submitted to the Executive Board for consideration, and returned to the House for final action.

Now, if you will turn to Article IX of the By-Laws, Sections 8 and 9 read:

Section 8. All matters submitted to or originating in the House shall be acted upon and referred to the Executive Board. If reported favorably or without comment, the action taken by the Executive Board shall be final.

Section 9. In event of an irreconcilable dispute between the House of Representatives and the Executive Board, the president is auform a "joint high commission" thorized to composed of two members of the House and two members of the Board, who shall choose a fifth member from the active membership. On questions submitted to it, the decisions of the joint high commission shall be final. The Constitution and By-Laws are in disagreement. This was called to our attention by Dr. Hurt, and the Executive Board proposes this change, to come up for final action next year:

Delete Sections 8 and 9 of Article IX of By-Laws, as it is in conflict with Article VI,

Section 3 of Constitution.

In other words, we want the final decision to with the House of Representatives. That a proposal, since the paragraphs cited are in disagreement. We feel that the action of the representatives of the constituent asso-ciations should be final, because this, after all, is a democratic organization. We have suggested that we stick by the Constitution and delete Sections 8 and 9 of the By-Laws.

PRESIDENT HAGAN: Gentlemen, this means that this should be the legislative body. The Executive Board is merely an executive group to carry out the wishes within the limitations set by this body, in the Constitution and By-No action is required on this at the Laws.

present time.

According to the Constitution, these amendments must be presented a year in advance, in writing. This has been done today; it was done yesterday before the Executive Board. It will be published in the JOURNAL, and next year it will come up in the same way the other amendments have been presented today for final action. DR. DENNIS COUGHLIN (Tenn.): Mr. Chair-

DR. DENNIS COOCHEAN (tolerand) man, it looks to me that Section 8 was put in to speed some kind of action. Of course, it conflicts with the Constitution. If that is the expect it will be illegal from our

standpoint, anyway, wouldn't it?

It looks to me like it was put in there to kind of speed action; we could complete some kind of action at one session, with Section 8.

PRESIDENT HAGAN: I think, Dr. Coughlin, it can be done with the section of the Constitution of the constitution of the constitution.

it will be. That was discussed quite length, an hour or so was spent on it.

It was, finally, the opinion of the Executive Board and the Board of Governors, both, that it would not retard action, that everything you can accomplish in Section 8 can be accomplished by the section already present in the Consti-tution. We may be wrong in that, of course; perhaps you are right. This gives you a chance to think about it. You can read it over and compare these, and next year, when you come here, we will be ready to discuss it and take final action.

I think that completes everything under this section, unless some member wishes to introduce something today. Are there any other amendments that anybody would like to

other amendments that anybody would like to present from the floor?

Then we go to No. 7 on the agenda, Pro-posals for Honorary Membership. I will ask Dr. Klussendorf to read the section of the Constitution relating to Honorary Membership.

PROPOSALS FOR HONORARY MEMBERSHIP

Dr. Klussendorf read Article X, Section 5 of the Administrative By-Laws.

PRESIDENT HAGAN: The Executive Board has two nominations it wishes to present. I will ask Chairman Krill to present those and, when he has finished, it is your privilege, as I understand the Constitution, to nominate still others if you wish. We will not vote on them now. This is merely for your information. At the next session, we will vote on it. Chairman Krill.

DR. W. R. KRILL: There were three names presented for honorary membership in this As-sociation: Professor L. D. Bushnell of Kansas State College, whose name was proposed last year and was deferred because we were limited in the number we could take; Dr. Albert Hjärre of Sweden, and Professor Axel Salstedt of Sweden.

The Executive Board voted to recommend to the House, for election to honorary membership, Dr. L. D. Bushnell of Kansas State Colege, and Dr. Salstedt of Sweden, and that action be deferred on the nomination of Dr. Hjärre until next year.

PRESIDENT HAGAN: This is given to just for your information. Are there any other nominations? If not, this matter will come up again later for final consideration.

The next item on the agenda is the report of the Executive Secretary. I understand Dr.

Klussendorf will read a synopsis of this report.

Report of Executive Secretary

To members of the Executive Board and House of Representatives:

The following report covers the period from Aug.

1, 1947, to July 31, 1948, inclusive.

I. MEMBERSHIP

On Aug. 1, 1947, the membership was 9,248. During the year, 336 applicants were admitted and 97 delinquents returned to good standing, after having

been dropped for non-payment of dues, a total of 433. During the same period, 275 members have been lost, 86 by death, 21 by resignation and 168 by delinquency, leaving a net increase of 158 as shown by the following recapitulation:

Members as of Aug. 1, 1947 Applicants admitted Returned to good standing	9,248* 336 97	
		9,681
Lost by death	- 86	
Lost by resignation	21	
Lost by delinquency	168	-275
Membership as of Aug 1, 1948		9,406
Membership as of Aug. 1, 1947		
Gain for the year		158

^{*}Corrected from 9,256; misprint in 1947 report.

The small increase is accounted for largely by the small number of veterinary graduates this past year. Five of the accredited schools had no graduating classes and so the number of applications from that source was only about 45 per cent of the total instead of the usual 65 per cent or more. From 1941 to 1948, inclusive, 5,455 applications have been processed, of which 66 per cent have been from student chapter members at graduation time and 34 per cent from other sources. For this report year, 156 of the 336 applications were from graduating seniors, and 180 were from other sources.

Return to Good Standing of Members in Service.

—During the war, the Association lost contact with many members in military service. The Executive Board ruled that such men and others on active military duty, who found it difficult or impossible to maintain their membership, could return to good standing by paying only current dues. This past year, a special letter was sent to all such members whose addresses were available; as a result, 118 took advantage of the opportunity to renew their membership after lapses of two or more years.

Honor Roll.—It is especially pleasing to record the addition of a distinguished group of six members to those who have held membership continuously for 50 years. The names of these men, all of whom joined the Association in 1898, are as follows:

Charles E. Cotton (UP '93), Minneapolis, Minn., former state veterinarian of Minnesota, now retired.

John W. Griffith (ONT '92), Cedar Rapids, Ia., prominent practitioner of that state and still active. John R. Mohler (UP '96), Washington, D. C., former chief of the Bureau of Animal Industry, now retired.

Erasmus M. Nighbert (ONT '94), Cantonment, Fla., former prominent member of the BAI field staff, now retired.

John D. Sprague (CVC '94), David City, Neb., prominent practitioner of that state, and still active. Ray J. Stanclift (CORN '98), Shawnee, Kan., formerly a colonel in the Army Veterinary Corps and one of the outstanding officers in the formative

days of the Corps, now retired.

These men have been notified that they are now life members without payment of further dues. Two honor roll members died during the year, John W. Connaway (CVC '90), of Missouri, and Charles R. Borden (AMER '92), of Massachusetts. The complete list of honor roll members now numbers 14, the others, in addition to those listed this year,

H. P. Eves (UP '87), Wilmington, Del., admitted in 1889. E. B. Ackerman (AMER '91), Huntington, L. I.,
 N. Y., admitted in 1891.
 N. S. Mayo (CVC '89), Highland Park, Ill., ad-

nitted in 1891.

John B. Hopper (AMER '92), Ridgewood, N. J.,

admitted in 1892. Bernhard P. Wende (ONT '92), Buffalo, N. Y., admitted in 1892.

mitted in 1892. L. A. Merillat (ONT '88), Chicago, Ill., admitted in

1893. Paul Fischer (OSU '92), Lakeland, Fla., admitted in 1895.

Charles H. Higgins (MC G '96), Pearl River, N. Y., admitted in 1896.

Deaths.—From Aug. 1, 1947, to July 31, 1948, the deaths of 86 members have been reported to the central office. However, 23 of these died some time prior to the period covered, but had not been reported to us. The names of the deceased members follow:

Agnew, T. H. Baldwin, F. M Bales, Harold W. Bateman, Robert A. Bayler, Theo. M.
Beere, Merritt H.
Bilts, Robert O.
Blakely, Franklin C.
Boen, Nels Theodore Boone, W. L. *Borden, C. R. Boucsein, G. L. Brown, Ellsworth S. Burke, Francis P. Burrows, Samuel Clausen, C. N. *Connaway, J. W. Copithorn, Harry K. Core, O. H. Coughlin, John G. Crowforth, Anderson Dennis, William A. Dibbern, C. J. Diller, C. R. Ebright, Glenn L.
Elsinga, Herbert
Fisher, Roy T.
Fridirici, Curtis A.
Frush, C. W. Gill, J. C. Gilloon, T. J. Givens, Harvey C. Graham, Joseph A. Graves, Colby Grootes, M. Hanson, E. W. Harry, George E. Hayden, C. E. Healy, James S. Heath, B. W. Hess, Egbert S. Hobbs, Walter R. Ivens, Wm. Henry, Sr. Jacoby, Alfred M. Jenks, Ralph C. King, John P. Kocher, W. E. Leighton, Harry R. McEwan, J. L. McLaughlin, A. R. McNamara, W. F. McNamara, W. F. Maxson, Wilbur B. Melody, George E. Mickelsen, C. H. Miller, Leslie D.
Mitchell, Charles J.
Molison, James T.
Morgan, Donald R. Mosedale, Robert E. Mulford, Harry E. Nichols, Jeptha H. Olson, C. W. Paulish, Chelsea T. Poley, Philip P. Potter, George M. Powell, R. R. Rayl, Emil C. Sass, C. W. Schattenburg, A. E. Schrumpf, H. R. Schubel, E. C. W. Scoville, Sheldon H. Shreve, R. M. Simpson, Hal C. Steinkolk, Frank B. Still, Seaborn H. Stout, E. N. Taussig, Paul E. Tudor, Alven O. Turner, Joe G. Vanderwarf, Cornelius Watson, J. S. Whitcomb, R. E. Williamson, Wallace L. Woodliffe, M. J. Young, Guy F.

*Honor Roll Member

Resignations.—Twenty-one resignations have been submitted during the year and accepted by the Executive Board. The reasons given were: retired, 10; health, 4; "no gain from membership," 1; dissatisfaction with association policy, 1; no reason. 5.

Distribution of Membership.—The accompanying table shows the membership by geographical divisions and special classifications. The members tabulated in the third column, "Paid 1946," will be notified once more of their delinquency and, failing to pay, will be dropped from the membership roll during the year.

PAYMENT OF DUES AND DISTRIBUTION OF

	MEM	BERS	HIP		0-1-
	Paid		Paid		Gain (+) or
State	1948		1946		Loss (-)
Alabama	123	10	10	143	-3
Arizona	44	2	1	47	+8
Arkansas	41	4	- 4	46	+6
California	719	26	14	759	+53
Colorado		7	2	154	
Connecticut	100				+2
Delaware	27	1	1	29 58	+3
Dist. of Columbia	55		1	58	-3
Florida	132	15	2	149	+11
	116	17	6	139	-2
Idaho	50	2		53	
Illinois			10		
Indiana	316			336	
Iowa	447	13 16	9	469	
Iowa Kansas Kentucky	244	10	6	266	
Kentucky	102	2		105	
Louisiana			2	76 46	+3
Maine	10	6	i	127	111
Maryland	159	5	1	105	
Massachusetts	109	15	1	165	-2 +8
Michigan		10	1	342 318	4-0
Minnesota	802	4	1	49	+37
Mississippi	236			253	
Missouri	46	4		50	
		7	1	178	+7
Nebraska	20	4	1	25	+3
New Hampshire	31	4	7	35	-2
New Jersey	204	12	6	222	
New Mexico New York	97	4.		41	
New York	- 588	23		622	-10
North Carolina.	101	5	3	109	
North Dakota	39			39	
Ohio	490	22	16	528	21
Oklahoma	102	4	6	112	
Oklahoma Oregon	132	6	4	142	+9
Pennsylvania	407	18		427	+10
Rhode Island	18		2	20	+1
South Carolina.	51	3	- 1	5.5	
South Dakota Tennessee	63	1	1	65	-1
Tennessee	. 79	- 4	3		+5
Texas	350	19	9	378	-11
Utah	39	4		43	8
Vermont	42	2	0-0	44	+1
Virginia	144	10	1	155	+16
Washington	198	6	4	208	-14
Washington West Virginia	32	1	1	34	
Wisconsin	255	9	- 6	270	+9
Wyoming	40	3	1	44	
Subtotal	8,132	381	174	8,687	+143
Possessions	26	5		31	+7
Canada		14	4	223	+20
Mexico	44	9	2	55	+32
South America.	82	6	4	92	+23
Foreign	57		4	67	+20
APO	35	1	2	38	-13
Honor Roll				14	+4
Honorary	29			39	
Special Corner	7			7	
Miscellaneous* .	153			153	80
-				-	
	662	41	16	719	+15
Grand Total	8,794	422	190	9,406	+158

^{*}Made up of members requesting suspension while in military service, 59; addresses unknown, 54; members receiving AJVR instead of AVMA Journal, 40; total, 153.

II. FINANCES

During the fiscal year ended June 30, 1948, the executive secretary's office transmitted receipts totaling \$168,721.81 to the association's depository bank for the account of the treasurer. This does not include contributions to the Re-

search Fund which are kept separate from other association funds.

During the same period, expenditures of \$189,-297.38 were vouchered for payment, leaving a deficit of \$20,575.57 for the year's operations. This is the second consecutive year in which an operating deficit has occurred and reflects the spiral of high costs in which business activities of all kinds have been caught in recent years. Last year, the Committee on Budget found it necessary to submit a deficit budget to the Executive Board and House of Representatives (accutive Board and the committee, namely, the desire to continue rather than to cut down the association's greatly expanded program. The Executive Board and the House strongly and unanimously supported the recommendation, recognizing the need for, and desirability of, a strong association program even in the face of still-increasing expenses incident to publication of our journals, committee activities, and so on.

The report of Treasurer W. A. Young, found elsewhere in these proceedings, summarizes the receipts and disbursements for the fiscal year, and shows the association's net worth, all as reflected by the official audit. The reason I am commenting upon financial matters is because, under our constitution and by-laws, the executive secretary is defined as the general manager of the association and is charged with directing its business. Part of that business is to voucher bills for payment of the association's activities in accordance with the provisions of the annual budget. It is a matter of record that a comprehensive budget has been submitted only since 1940, and that only since then has there been an earnest effort to estimate the association's yearly income and expense. Prior to that time, a partial budget only was prepared, listing only a few of the major items of expense.

Even under the system of preparing a complete estimate of income and expense, the budget items provided for various activities have been applied only as a guide since few expenses are "fixed" and can accurately be estimated in advance (examples: rent and light, salaries). Most of the costs are subject to variations which are not controllable in the strict sense of the term (examples: postage, printing of journals). The principal items in which costs exceeded budget estimates appreciably during the past year were:

Item .	Budget	Actual	Excess
Committee Expenses.	\$ 4,000.00	\$ 5,529.45	\$1,529.45
Convention	15,000.00	19,812.90	4,812.90
Directory	3,000.00	4,868.76	1,868.76
Emblems	200.00	2,894.30	2,694.30
Miscellaneous	2,500.00	4,745.45	2,245.45
Printing-JOURNAL	25,000.00	29,606.74	4,606.74

Total for items....\$49,700.00 \$67,457.60\$17,757.60

These 6 items, out of a total of 35 in the budget, accounted for nearly 90 per cent of the "budget excess" expenditures during the year and for most of the deficit.

Committee Expenses.—Individual AVMA committees are seldom allotted a fixed sum any more, for the reason that they do not know what their precise programs will be when the budget is prepared. Hence, in recent years, a lump sum has been provided to which the expenses of various committees are debited. Sometimes an especially active committee needs more than its anticipated share or is assigned a special task which requires more financial support than had been expected.

Convention Expense.—By their very nature, conventions are somewhat unpredictable financially, although each one is operated on a carefully worked-out budget. But convention income and expense are subject to factors which make them financial

ventures to some extent. Actually, the 1947-48 conventures to some extent. Actually, the 1947-48 convention year, which included the Cincinnati meeting. did not have a deficit of \$4,812.90 as might be inferred from the foregoing table; the deficit shown is a "budget" or "bookkeeping" deficit and not an actual one. The Cincinnati convention actually made a small profit.

Directory and Other Printing Costs.-The cost of the 1947 Directory was more than \$1,800 above the budget estimate due to greatly increased printing costs when it finally went to press, This condition is also reflected in Journal printing costs of nearly \$5,000 above the estimate. It is feared that the ceiling of these costs has not yet been reached in the Chicago area.

Emblems.-Exenditures over the budget estimated were due to purchase and stocking of metal-enamel auto emblems, which became available again, after a war-time lapse, after the budget was prepared. This item pays for itself over a two or three year period and even returns a small profit.

Miscellaneous Expenses .- This item serves as a catch-all for many small items, many of which cannot be anticipated.

The foregoing comments are for the purpose of giving the governing bodies and the membership an understanding of some of the factors that affect the association's financial affairs. As your general manager, I am deeply concerned that the associa-tion's reserves be not depleted by further deficits if they can be prevented. I understand the rea-sons for continuing the effective and greatly ex-panded program of association activities and am entirely sympathetic to the further expansion of our work compatible with a healthy financial program. The proposal to increase the dues from \$7.00 to \$10.00 a year is certainly timely and essential to further progress. It may be noted, also, that the Board of Governors (= Committee on Journal) have recently approved an increase in advertising rates which will go into effect in January, 1949, to help meet some of the increased printing costs.

In setting up the budget for the current fiscal year, I have asked that a balanced budget be sub-mitted, at least as a goal, for 1948-49. I have also suggested to the Executive Board and House of Representatives that the provisions in the new budget be considered as binding or controlling upon the central office in its payment of the various association expenses. This may already be implied by the by-laws but has never been strictly enforced, due, perhaps, to the fact already men-tioned, that many operating costs are not fixed and, therefore, not strictly controllable. Unless such measures are taken, rising costs and the expanding program of association activities can rapidly reduce our modest reserves.

The budget for the fiscal year 1948-49 as finally adopted, appears elsewhere in the proceedings.

III. THE RESEARCH FUND

No organized program for raising money for the Research Fund was adopted until 1945, although the Research Council was set up in 1942 and the the Research Council was set up in 1942 and the first fellowship was granted that same year. A special committee on financing research was ap-pointed by President Farquharson late in 1945, and a drive was started for contributions from veteri-narians in 1946 as you will recall. The status of the Research Fund since 1942 is summarized in the following table.

Fiscal Year	Receipts	Fel- lows	Disburse- ments	Bal- ance
1942-43	\$ 3,400.00	1	\$2,400,00	\$ 1,000.00
1943-44	2,400,00	1	2,400,00	1,000.00
1944-45		0	*******	1,000.00
1945-46	41,472.81	0	110.25	42,362.06
1946-47	: 48,200.59	3	4,427.95	86,134,76
1947-48	5,715.00	- 6	8,076.33	82,773.37

No active solicitation of research funds has been made this past year, but it is expected that a campaign will be launched this year, including an opportunity for AVMA members to contribute on an 'annual giving" basis.

IV. PUBLICATIONS

Dr. Klussendorf, assistant executive secretary and associate editor, will report for the editorial department. (See p. 397 for report.)

V. EXECUTIVE BOARD ELECTIONS

Elections are now taking place in Districts II and III and will be completed on August 28. nominees in District II (Delaware, District of Columbia, Maryland, New Jersey, and Pennsylvania) are:

- J. D. Beck, Philadelphia, Pa.
- A. L. Brueckner, College Park, Md.
- E. R. Cushing, Plainfield, N. J.
- J. J. Martin, Jersey City, N. J. B. C. Pier, Washington, D. C.

S. F. Scheidy, Drexel Hill, Pa. (incumbent)

A tie for third, fourth and fifth places in the nominating election made it necessary to list six candidates instead of the usual five. In District III (Illinois, Indiana and Wisconsin)

the nominees are:

- J. L. Axby, Indianapolis, Ind. (incumbent) L. E. Boley, Urbana, Ill. E. M. Lynn, Chicago, Ill. O. Norling-Christensen, Wilmette, Ill. J. T. Schwab, Madison, Wis.

These elections are for five-year terms. The sults will be published in the October Journal.

Study Proposed of Boundaries of Executive Board Districts, and of Method of Executive Board Elections.-I plan to recommend to the Executive Board at a future session that a study be made of these matters because (1) there appears to be a marked inequality in the membership representation that the present apportionment affords, and (2) because the present method of nominating and electing board members, while highly democratic and desirable from that viewpoint, has certain weak-nesses now that the membership has grown so large.

VI. WOMEN'S AUXILIARY

It is highly pleasing to note the continued and highly effective program of the Women's Auxiliary which has brought such marked increase in interest in the work of, and membership in, the Auxiliary. It now has a membership of over 1,000 and the Auxiliary officers are to be highly commended for the excellent program which has been carried on this past year.

VII. MAIL AND CORRESPONDENCE

As a continuing index of the growth in the association's routine work and activities, the following figures are reported:

Incoming Mail:	
Letters, all classes3	7,104
Various publications	
Packages	1,321
Total4	2,140
Outgoing Mail:	
First class	1,537
Third class7	1,468
Journals (AVMA & AJVR)14	4,027
Total 90	7 099

The various other activities of the association have been fully covered in the reports of officers and committees. It is urged that members read these carefully in order to gain a full understanding of the breadth and significance of association activities.

In conclusion, grateful acknowledgment is made of the fine support and cooperation rendered the central office staff by the officers, committees, and members of the Association and, in turn, I deeply appreciate the splendid efforts of the central office staff in making the association machinery function. Respectfully submitted,

s/J. G. HARDENBERGH. Executive Secretary.

PRESIDENT HAGAN: What is your pleasure

with respect to this report?

DR. C. R. CURTIS (Wis.): I move its adoption.

DR. I. S. McADORY (Ala.): Second the motion.

PRESIDENT HAGAN: It has been moved and seconded that the report be adopted. Are there any remarks? Those in favor of the motion say "aye"; opposed "no." The "ayes" have it. It is so ordered.

Next we will have the report of the Editors, by Dr. Klussendorf.

Report of the Editorial Department

To Members of the Executive Board and House of Representatives:

The number of Journals of the AVMA printed has climbed from 11,500 copies in July, 1947, to 12,500 copies in July, 1948. The Research Journal, which had lost some ground in the previous year, is now back to its high point of 3,500 which it attained in October, 1946. The number of pages we have been able to print has also been increased somewhat, 126 additional pages of reader to be specific. There has been a slight decrease in the number of pages of advertising during the year

just closed.

This program of expansion was put into effect in order to give a more complete coverage of veterinary progress in this country and throughout the world. It now appears that a certain amount of retrenchment has become necessary, since the rising costs of printing have caused us to exceed the budgetary allowances. In order to hold costs at or near the budget figures, it is planned to impose a limitation upon the number of pages in each Journal. It is proposed that this be done by culling the manuscripts submitted more closely and not by deletion of any portion of the news or the coverage of the veterinary literature of the world. This cull-ing of manuscript can be done by rejecting some manuscripts and by requesting that others submitted in more concise form. Manuscript is received in sufficient abundance so that it would be not only possible, but desirable, that papers be sifted with greater care.

Our access to veterinary and livestock publica-tions from all parts of the world continues to improve, and the number of journals received increases month by month. The weakest link in the editorial chain at this time appears to be a failure to glean from these journals a full quota of ideas and suggestions for helping our members to render a better, a more complete, and a more efficient veterinary service to the owners of livestock. Two ways seem to offer some promise of accomplishing this: addition of another veterinarian to the staff as contemplated by the Board, and/or the use of a dictating machine to permit more effective use of the time of staff members. Literature can only be reviewed, or condensed, or abstracted by making notes. If these could be recorded in voice rather than in writing it might involve one extra operation by a stenographer, but it would permit a reviewer to cover more ground, or to cover a given ground

more effectively, in a specified time.

AVMA Press Service, the clipsheet launched as Animal Health Topics, continues to be accepted as a source of reliable information by the editors

of rural weeklies all over the country. Clippings returned to us indicate that the material selected is considered to be worthy of use. Reports of several AVMA committees have furnished information on the seasonal incidence of animal health problems, and this has enabled us to present seasonal items at the appropriate time of year as a balance to items having news value. AVMA Press Service is mailed once a month to 5,200 editors of rural week-lies which circulate in towns and villages of less than 10,000 population. During the past year, total cost of printing and mailing was \$2,782,00. During the past year, the

Printing and labor problems have arisen in the course of the year. For the JOURNAL of the AVMA, these have resulted in marked increases in the cost of publication, while for the American Journal of Veterinary Research they meant, in addition, a complete cessation of activity for more than fourteen weeks. At that time, it was decided to transfer the Research Journal to another plant. As a consequence, the April issue is just out. We have been assured that the July issue will follow in about one month, and that the October issue will again be on schedule.

The editorial department has a capable and congenial group of workers, and is undoubtedly work-ing more effectively than at any time during recent

Respectfully submitted, s/R. C. Klussendorf, Associate Editor.

PRESIDENT HAGAN: You have heard the report of the Editors. I will now ask you to take action on this. What is your pleasure with respect to this report?

DR. B. J. KILLHAM (Mich.): I move that the

report be accepted and approved.

DR. I. S. McADORY (Ala): Second the motion. PRESIDENT HAGAN: The motion is before you. Any remarks? If not, those in favor say "aye"; opposed "no." The "ayes" have it. It is so ordered.

We next will have the report of the Treas-

urer, Dr. Young.

Report of the Treasurer

To members of the Executive Board and House of Representatives:

One year ago I began my term of office with considerable feeling of concern as to my ability and fitness to serve as the Association's treasurer.

As this first year comes to a close, I am pleased to report that some of my worries about the office have subsided due to the excellent cooperation and efficient operation of the AVMA office. I am par-ticularly grateful to Executive Secretary Hardenbergh and Mrs. Evelyn Lumpkin for their consistent help in the detail work concerned with the Association's financial transactions.

The official audit sets out in concise manner the year's financial happenings with a comparison of the various fund balances at the beginning and

close of the year.

The major points of the audit are: The gross income of all departments of the AVMA, including the Research Fund, was \$174,-661.81. expenditures of all departments

The gross amounted to \$198,498.71.

The total cash assets of the Association changed from \$212,120.69 at the beginning of the year, to \$188,283.79 at the end of the fiscal year—June 30, 1948, the decrease being \$23,836.90.

I am deeply grateful to the members of The

American Veterinary Medical Association for the honor and trust indicated by my election as treas-urer and assure you the year's service has been a pleasant one for me. (See p. 398 for treasurer's report.)

Respectfully submitted, s/W. A. YOUNG, Treasurer.

Financial Report—W. A. Young, Treasurer

CASH RECEIPTS

July 1, 1947, to June 30, 1948

July 1, 1947, to June 30, 1948	
A.V.M.A. Fund (dues, advertising, subscriptions and miscellaneous)	8,551.11 125.00
A.V.M.A. Research Fund (contributions and interest on bonds)	\$168,946.81 5,715.00
Total receipts Less: Cash disbursements	
Excess of cash disbursements over cash receipts	\$ 23,836.90
CASH DISBURSEMENTS	
July 1, 1947, to June 30, 1948	
A.V.M.A. Fund	7,373.63
A.V.M.A. Research Fund (not including purchase of U. S. Treasury bonds)	\$189,422.38 9,076.33
Total disbursements	198,498.71

COMPARATIVE BALANCE SHEET

June 30, 1948, and June 30, 1947

	June 30		Increase
ASSETS	1948	1947	(Decrease)
General and Special Funds: Cash in banks		\$ 42,835.99	\$(20,475.57)
Investments in U. S. bonds	83,150.00	83,150.00	
	\$105,510.42	\$125,985.99	\$(20,475.57)
RESEARCH FUND:			
Cash in bank		\$ 61,134.70 25,000.00	\$(43,361.33) 40,000.00
	\$ 82,773.37	\$ 86,134.70	\$(3,361.33)
	\$188,283.79	\$212,120.69	\$(23,836.90)
Represented by: GENERAL AND SPECIAL FUNDS:			
A.V.M.A. Fund		\$116,035.39 5,000.00	\$(20,575.57)
Salmon Memorial Fund	. 5,050.60	4,950.60	100.00
Research Fund	\$105,510.42 . 82,773.37	\$125,985.99 86,134.70	\$(20,475.57) (3,361.33)
	\$188,283.79	\$212,120.69	\$(23,836.90)

PRESIDENT HAGAN: You have heard the report of the Treasurer. Are there any questions, any details you would like to know about? If not, what is your pleasure?

DR. A. A. HUSMAN (N. Car.): I move its

adoption.

DR. DENNIS COUGHLIN (Tenn.): Second the motion

PRESIDENT HAGAN: It is moved and seconded that the report be approved. Any remarks? Those in favor say "aye"; opposed "no." The "ayes" have it.

The next item is the presentation of the

budget for the coming year. I am going to ask Dr. Hardenbergh if he will give you some details on this.

Report of Committee on Budget

EXECUTIVE SECRETARY HARDENBERGH: Mr. Chairman and Gentlemen: Unless you want air, chairman and Gentlemen: Unless you want this budget presented in detail, including some forty items into which the budget is broken down, I will simply give you the totals for the various groups of expenditures and also the anticipated receipts for the fiscal year 1948-49. Does anyone want this in complete detail? ("No.")

Executive Secretary Hardenbergh highlighted the budget.

Report of the Committee on Budget Budget Estimates-1948-49

Receipts	
AVMA FUND	
Convention	17,000.00
Directory	6,000.00
Dues-60%	57,000.00
Emblems and Keys	1,500.00
Miscellaneous	5,000.00
Reprints	3,500.00
U. S. Bond Int.	2,000.00
Total\$	92,000.00
AVMA JOURNAL	
	47,000.00
	38,000.00
Subscriptions	14,000.00
Total\$	99,000.00
RESEARCH JOURNAL	
Advertising\$	300.00
Subscriptions	8,000.00
Total\$	8,300.00
Grand Total\$19	9,300.00
Less Disbursements 19	

AVMA EXPENSE Bank Coll. Charges\$ 300.00 Committee Expense 5.000.00 Convention 17,000.00 5.000.00 00

Emblems and Keys	500.00
Furniture and Fixtures	1,000.00
Ins. and Fidelity Bonds	600.00
Miscellaneous	3,000.00
Motion Picture Library	750.00
Office Supplies and Stat	3,500.00
Postage	7,000.00
Professional Fees	1,850.00
Publicity—Fairall	7,500.00
Publicity—AVMA Press Service	3,000.00
Refunds	
Registry of Vet. Pathology	1,000.00

Surplus or Deficit -0-

Disbursements

Directory

Reporting	1,000.00
Reprints	3,000.00
Research Fund Drive	250.00
Salaries	58,500.00
Scientific Exhibits	1,500.00
Taxes	1,000.00
Tel. and Tel	1,500.00
Travel-AVMA Officers	10,000.00
Travel—Delegates	6,000.00
Veterinary Congress Prize	125.00
U. S. Bond Purchase Prem	
Total AVMA Expense	46,475.00
40% charge to Jour. ('48-'49)	58,590.00
	87,885.00
AVMA JOURNAL	
Cuts and Etchings\$	2,300.00
Envelopes	1,500.00
Paper	7,000.00
Printing 30,000	30,000.00

Rent and Light

Cuts and Etchings		********	8	2,300.00
Envelopes				1,500.00
Paper				7,000.00
Printing 30,000				30,000.00
Share of AVMA Ex	penso.			58,590.00
Total			\$	99,390.00
RESEARCH JOURN				

Cuts and	E	to	h	i	n	g	9															750.00
Envelopes				*										4		×						275.00
Paper														*								2,000.00
Printing .								*			*	*		×	*			*	×	*		9,000.00
Total			×									,	*	*							\$	12,025.00
Grand Tota	al																				\$1	99,300.00

PRESIDENT HAGAN: Are there any questions or discussion? A. A. HUSMAN (N. Car.): I move its

adoption. DR. I. S. McADORY (Ala.): Second the motion.

PRESIDENT HAGAN: It is open for discussion.

. The question was called for.

PRESIDENT HAGAN: Those who favor this motion say "aye"; opposed "no." The "ayes" have it, and the budget has been adopted.

Now we come to the reports of a series of standing and special committees. On standing and special committees. On some of these there may be, I hope there will be, some active discussion; on others, perhaps, there will not be too much. I think, to save a little time, I will operate in this way, if you are willing: In case there is no challenge, I will simply state, "If there is no objection, we will consider the report approved." That will avoid the there' necessity of somebody moving and somebody seconding, and passing each one of those. I don't know whether that is irregular or not, but that will speed it up, I think. If you are willing, we will proceed in that way.

If you have your preprints, we will take up the reports.

Report of Council on Education

The first is the Council on Education. Are there any questions or any discussion on this report? I don't want to shut off discussion; I want to keep things moving. If you have something to say, stand up and say it.

DR. JOHN MICUDA (Ariz.): I noticed here

that the School of Veterinary Medicine formerly at Middlesex has been closed. Would it be possible for the Council on Education to bring possible for the Council on Education to bring up a matter of trying to do something for these so-called illegitimate children of the veterinary profession? It seems to me there is a lot of talent in some of those boys that is going to waste. I would like to hear some discussion on that.

PRESIDENT HAGAN: Would anybody like

to discuss the matter? I might say this: Of course, in the matter of eligibility of its graduates for membership, the school was not approved. Therefore, according to the Constitution, they cannot be admitted unless the Constitution is amended in the usual way. The Executive Board has a certain amount of discretion, however, on schools that have been closed. The matter is being discussed. For the moment, there is no action being taken for the present year. That was decided in the Executive Board yesterday. I don't believe the Council on Education would have any authority at any rate, but it also has given some con-sideration to the matter. Would anybody else ke to discuss this question?
DR. TOM EVANS (N. M.): We had one boy

drift into our place just recently. He has been endeavoring to go back to another veterinary school. He started in Pennsylvania; is a graduate of Middlesex. He put in two years

in Pennsylvania, and then he went to Middlesex.

If they want to, how are they going to get back in and finish their work? Is there nobody who wants them? I think something ought to be done with them. to be done with them. Either they should be permitted to finish their education legitimately, because, if we don't, we just have another batch of illegitimate children, as Dr. Micuda and they are not beautifully colored Says. good-looking, either. It is a distinct problem, because some of them are good veterinarians,

in spite of their education.

I think, if any of them wish to become recognized veterinarians, they ought to have a little better chance than to be turned loose without any hope of ever changing their status.

I think that my own point of view, and that of others in my community in touch with the circumstance, is that if they could go ahead and qualify properly, they should be given the opportunity. I would like to know the attitude of the Council on Education on it.

DR. H. H. STEWART (Miss.): I believe the deans of the veterinary schools, if they could see fit, should take those boys in and try to finish them off, get them out of circulation in the irregular way and make good veterinarians out of them, if they could find room on their schedule.

A. PAQUIN (Mass.): I believe of the colleges do allow Middlesex graduates to take up their courses and allow them a year's schooling. The only reason a lot of them don't get in is because a lot of the others cannot get in. It is a matter of the decision of the faculty.

DR. J. F. KNAPPENBERGER (Kan.): I feel

that those boys knew the status of the institu-tion they were entering, when they entered it, and knew there would be some question about their eligibility later. I, personally, cannot feel very sorry for them. There are a lot of good boys in the country who would like to be veterinarians and have not the opportunity to enter school

thool right away.

TOM EVANS (N. M.): It isn't a question that I feel particularly sorry for them.

are going to be a thorn in your side until you get them on one side or another. That was my reason for speaking.

PRESIDENT HAGAN: Any further discussion? I think I can say, finally, as I said a moment ago, this matter is being seriously considered. Please accept that much. It is a serisidered.

ous problem, but the matter is not being ig-nored. It is being given consideration. If there is no objection, I will consider that the report of the Council on Education has approved been

O. A. LOPEZ-PACHECO (P. R.): I notice that somewhere in this report it says that some of the schools are continuing to enroll larger numbers than can be adequately instructed. Isn't that placing those schools automatically on probation?

PRESIDENT HAGAN: I can asnwer that question, Dr. Lopez. I happen to be on the Council on Education, so that I can tell you, it is public information. In the report last year, was stated that some of the schools are on probation at the present time, but it is not public probation. At the present time the Council is not announcing to the public which schools are on probation, but some of them are warned and are on probation.

In the meantime, probation means they are still approved; that is they will not be dis-approved; we hope we won't have to go that far but, in due time, probation will eventually widen into disapproval, unless changes are made.

Any objection to approving the report of the Council on Education as given? Hearing none, we will rule it is approved.

Report of Committee on Legislation

Next is the Committee on Legislation. discussion on this report? Any questions? Hearing none, I will rule that the report is approved.

Report of Committee on Biological Products

Biological Products: This is a very brief one. It was approved last year; therefore, I assume there is nothing to do but approve it this year.
DR. J. W. SAFFORD (Mont.): This was
discussed by our association in Montana. It appeared to us there should not be reaffirmation of a committee report in 1947, in view of the amount of work that could be done on biological products, as outlined in the duties of this particular committee in the By-laws, and nothing was done on it. Therefore, would like to

move that this report not be accepted.

PRESIDENT HAGAN: Do I hear a second to this motion? The motion was, in view of the fact that, as expressed by Dr. Safford, for the Montana group, the committee ought to be doing more work than merely reporting affirmation of the work that it bety ear, they are censor-ing the committee by disapproving this report. The motion is that it be disapproved. Is there a second?

DR. GEO. C. POPPENSIEK (N. J.): I second that motion.

PRESIDENT HAGAN: The motion is before you for discussion. There being no di I will ask you to vote on the matter. DR. P. G. MacKINTOSH (Wash.): N There being no discussion,

ere in 1947, what are we voting on? PRESIDENT HAGAN: I will have to ask the

Secretary what the discussion was. DR. SAFFORD: We are moving that this re-

port in 1948 be disapproved. PRESIDENT HAGAN: 7

Their motion has nothing to do with the 1947 report.

MacKINTOSH: It seems to me that the men who were not here last year do not know what took place, except what they read in the JOURNAL.

PRESIDENT HAGAN: They are not criticising the 1947 report but they are criticising the committee because in 1948 they do nothing more than reaffirm the report of last year. the feeling that they should have done more than to merely ask you to approve a report given a year ago. There ought to be some-thing in addition. That is true, isn't it, Dr. Safford?

DR. SAFFORD: D: That is it. HAGAN: The motion is that PRESIDENT HAGAN: The motion is that this report be disapproved. Is that clear? Any further discussion? If you vote "aye" on this you are disapproving the report as given here. will all of those who favor the motion say "aye"; all those opposed "no." I rule that the motion is passed and therefore this report is disapproved by the House of Representatives.

Report of Committee on Therapeutic Agents and Appliances

We next come to Therapeutic Agents and Appliances. Any discussion on this? Any questions?

DR. DENNIS COUGHLIN (Tenn.): I move its adoption. It calls for a financial consideration there, and I thought maybe we ought to have some consideration of it, and I so move.

DR. G. W. FITZGERALD (Army): Second the motion.

PRESIDENT HAGAN: Attention is called to the fact that it does call for a financial out-lay. I might tell you that has been provided for in the budget that you passed a while ago. Any discussion on the motion which is that we adopt this report? If not, will those who favor the motion say "aye"; opposed "no." The "ayes" have it.

Report of Committee on Public Relations

Next is the report of the Committee on Public Any discussion on this? Relations.

J. V. KNAPP (Fla.): I move it be ap-

DR. DENNIS COUGHLIN (Tenn.); Second the

motion

PRESIDENT HAGAN: I should have said initially, perhaps, that all of these so far, unless Dr. Krill advises you to the contrary, have been approved by the Executive Board. 'Later PRESIDENT HAGAN: on, if it comes to some points, he will interpose. Unless he does, you will understand the Executive Board has given its approval to the report as given.

The motion is, then, that we approve the re-port of the Committee on Public Relations. Any

questions or discussions?

DR. W. T. OGLESBY (La.): Just as a matter of information, is there a definite amount stipulated for this committee? It is not in here, but I just wondered if the budget covered it.

I just wondered if the budget covered it. EXECUTIVE SECRETARY HARDENBERGH: Yes, there is an item of \$7,500 in the budget for this year for the work in public relations. PRESIDENT HAGAN: Those in favor of the motion that it be adopted say "aye"; opposed "no." The "ayes" have it. The motion is carried.

Report of Committee on Poultry

Next is the report of the Committee on Poul-

y. Any questions? DR. M. R. BLACKSTOCK (S. Car.): I move it be accepted.

DR. G. W. FITZ GERALD (Army): Second the motion.

DR. I. S. McADORY (Ala.): Second the mo-

PRESIDENT HAGAN: It is moved and seconded that the report be adopted. Any discussion? Those in favor say "aye"; opposed "no." The "ayes" have it. It is so ordered.

Report of Committee on Parasitology

Next is the report on Parasitology. The Ex-ecutive Board has a report on this.

DR. W. R. KRILL: The Executive Board considered this a very fine report, and it is to be published in the JOURNAL. I don't know whether it will be published in the Proceedings, but it will be published in the JOURNAL as an article, subject to a few editorial clarifications, where certain terms are used such as Smear \$2, and words of that kind to indicate specific preparations. The committee is to be commended for doing an excellent job in for-

mulating this report.

PRESIDENT HAGAN: Any discussion on the

question'

DR. W. T. OGLESBY (La.): In connection with that report, the second sentence under Part 1 says: "Hence, it was decided to list the six most common conditions associated animal parasites."

It seems to me that might be a little clearer if you said, "Parasitic conditions." Of course, that will be taken care of.

DR. KRILL: That will be taken care of in the editorial department.

the editorial department.

DR. A. A. HUSMAN (N. Car.): I would like to make one comment on something that happened in North Carolina, to show you how correct they are: The fifteenth line says: "However regions." I would like rect they are: The fifteenth line says: "How ever, the marked difference between regions. In 1934, when they shipped over 100,000 cattle from the drought area into North Carolina, we had cattle scab in a dozen places or more scat-tered throughout the state. We had no adequate facilities for taking care of anything like that. We sprayed. I don't know that we ever did a good cleaning job. To our surprise, we never had a case of cattle scab. Can't the cattle scab live in North Carolina?

PRESIDENT HAGAN: Probably not. motion is that this report be adopted. Any Any further discussion? Those in favor of the motion say "aye"; opposed "no." The "ayes" have it.

It is so adopted.

Report of Committee on Nutrition

PRESIDENT HAGAN: Any questions or discussion?

DR. P. G. MacKINTOSH (Wash.): 1 move it be adopted.

PRESIDENT HAGAN: Let's cut it short. there is no objection, we will consider this re-port adopted. No objections? Hearing none, then we will consider it adopted.

Report of Committee on Registry of Veterinary Pathology

PRESIDENT HAGAN: Next is the Registry of Veterinary Pathology. Do I hear any objection to the adoption of this report? Hearing Hearing none, we will consider it adopted.

Report of Special Committee on History

PRESIDENT HAGAN: Next we go to the special committees-Committee on History. Any objections to be voiced on this report?

DR. E. A. GRIST (Texas): May I raise a general question on standing committees for the fourth time in four years? Section 1 in the

Administrative By-Laws says:

The president shall be empowered to appoint committees delegated to perform special duties. Their term of office shall be one year. The duties, members and chairmanship of special committees shall be designated to the House of Representatives in the announcement of their appointment.

Each year we have many, many committees, and it has always been a question in my mind (I know that originally they had some specific duties to perform) whether or not those duties been outlined any time in application to all the special committees that we do have in

this organisation.

I realize that in History they no doubt have a specific duty to perform, Nomenclature of Discases, and so on down the line. At no time do we dispense with any committee. They con-

tinue as a standing committee, in reality, producing volumes of material that no doubt good for the records, but I am just wondering if we do not have some specific duties to perform throughout these United States these days and times, and whether or not those are given consideration, or is this just a routine patronage appointment deal for committees that existed for a long time?

PRESIDENT HAGAN: I will say, so far as this current year is concerned, it was not entirely a matter of carrying along. I think we did dispense with a committee or two. The president has that prerogative. If he doesn't feel that there is anything for them to do, he can drop them. I don't know any new ones that were created. There were some special committees of the Board, but I don't believe we have any new special committees.

So far as outlining their duties is concerned, the president this year did, in one or two cases, undertake to point out to certain committees some functions which we thought they had.

According to Dr. Klussendorf, a full dozen of them received specific statements of what their duties were, what was expected of them.

DR. GRIST: The point I am trying to make ls, I realize they possibly have specific duties to perform, but we have no way to judge whether or not they have followed instructions. In some instances they make specific recommendations to us, but not in very many cases.

There should be some specific recommenda-tions made back to this body on the particular were to perform. duty they

PRESIDENT HAGAN: I wonder it that the ways true. Take the case of the Committee ways true. Take the case of the Committee always true. on History, the one under consideration. wouldn't expect them to report back if they are collecting material, which I understand they will do. Eventually, some time in the future, we hope this material will be utilized.

According to the Constitution, DR. GRIST: it says their term is for one year. At the end of the year they ought to report the action for the year. Or are they reappointed automatically, or how do we handle it?

PRESIDENT HAGAN: We have a new president each year, and you will have to ask each one of them. I will admit that some of these were reappointed automatically, but some con-

sideration was given to the matter.
DR. R. C. SNYER (Pa.): It seems that over
the past three years so many of these special committees, when they make the report for the year, include in the report a recommendation that the committee be continued, and the

House itself has approved it, and automatically has appointed the committee for the next year. DR. GRIST: I will grant that I helped to approve them, but I am still trying to find out

what the duties are. PRESIDENT HAGAN: Not only that, a number of special committees want to make themselves into standing committees, and there has been some little brake put onto that.

We are a little off the subject, perhaps, on this particular report, the report of the Committee on History. Any objection to its adoption as it stands? Hearing none, we will rule it has been adopted.

Report of Special Committee on Nomenclature of Diseases

PRESIDENT HAGAN: Nomenclature of Dis-ases. Any discussion? Chairman Krill has Chairman Krill has eases. something to say about this, from the Execu-Board.

DR. KRILL: I think all of us realize there is need for standard nomenclature of diseases.

This committee has been struggling along for some little time, and they have never been able to do very much because they have not received much financial support from the Association. This year the committee has suggested that funds be provided whereby they can get together and standardize this nomenclature and bring out a worth-while report, because it is difficult to do that by correspondence. The Board has recommended that the report be accepted and published in the proceedings; also that funds be provided as recommended. We hope that this coming year we can get some-thing concrete out of this committee.

PRESIDENT HAGAN: Do I hear any objections to the adoption of the report? If not, I will rule that it has been adopted.

Report of Special Committee on Food and Milk Hygiene

PRESIDENT HAGAN: Any discussion on this report? If I hear no objection, I will rule this report has been adopted. Hearing none, it is so

Report of Special Committee on Transmissible Diseases in Food-Producing Animals

PRESIDENT HAGAN: Any discussion on the report on Transmissible Diseases in Food-Producing Animals?

DR. J. W. SAFFORD (Mont.): We like this report. The question arose in our minds that in past JOURNALS the title was Committee on Brucellosis. In the content of this report they list a lot of diseases that I do not think are considered transmissible diseases. Therefore, I think it could be simply remedied by changing the title of this to Diseases of Food-Producing Animals, and accept the report, just omitting "Transmissible."

PRESIDENT HAGAN: If I gather your remarks correctly, Dr. Safford, you are referring to the addition of "Transmissible" in this title. DR. SAFFORD: Yes. It seems that with the addition of "Transmissible" it does not describe the report. In other words, a lot of diseases mentioned in the report are not transmissible.

I think they elected PRESIDENT HAGAN: to deal with transmissible diseases, but they have included in the report some that certainly are not transmissible. The point brought up is that there might be some editing done on this to make the title conform to the content. Do I hear any other objections to the report, if we assume editing will be done to make the content conform to title? If I hear no objection, we will rule then that the report is approved, subject to such editing.

Report of Special Committee on Diseases of Wild and Furbearing Animals

PRESIDENT HAGAN: Is there any discussion on the report of the Committee on Diseases of Wild and Furbearing Animals?

DR. W. T. OGLESBY (La.): I have a couple of questions, purely for information. It says: "In July, 1946, the responsibility of studying diseases of furbearing animals was transferred to the Bureau." My question is, were the vet-erinarians who were with the Fish and Wildlife Service transferred to the BAI, top, along with the specific function, or were they left with the Fish and Wildlife Service to do some other job?

PRESIDENT HAGAN: Can anybody answer

PRESIDENT HAGAN: Can anybody answer the question? Dr. Fauks, do you know?

DR. C. H. FAUKS (Okla.): As far as I know, they were not transferred. I have no knowledge of that being done.

DR. OGLESBY: The other point is, was the

BAI given additional funds for this particular function, or did they have to spread a little thinner what they already had? PRESIDENT HAGAN: I believe you will have

to ask Dr. Simms. He ought to be able to answer the question for you. I believe they were given additional funds.

DR. OGLESBY: Point 3: "Assist in production of an adequate textbook covering all the dis-

eases of wildlife."

It would appear to be reasonable that that particular function be assigned as a continuous function of this committee, or to some particu-lar individual. If not, it is one of those things that is recommended, it is fine and we need it, file it away, and nothing will be accomplished.

PRESIDENT HAGAN: I think, perhaps, that will be up to the incoming president to instruct this special committee in that way. Do I hear any objection to the adoption of this report? I

rule, then, it has been adopted.

Report of Special Committee on Diseases of Small Animals

DR. P. G. MacKINTOSH (Wash.): The Small Animals report is incomplete. Small animals have, as you know, become one of the large items of veterinary practice. It seems that we should give it more consideration, not that I am a small animal man.

PRESIDENT HAGAN: I guess those remarks will go into the record with the hope they will be passed on to the next committee. There is a recommendation in connection with this. Chairman Krill will report on that on behalf of the Executive Board.

DR. KRILL: There was considerable discussion of this report by the Executive Board. You will note that the committee has completed the manuscript for a booklet about parasites of dogs and other pet animals. "This illustrated booklet, when completed, will be available for distribution by the veterinarian to interested laymen, kennel owners, pet shop operators, and clients."

There was some question by the Executive Board as to whether that would serve a useful purpose, or whether it might be detrimental to profession, whether it might be wrongly d. There was considerable feeling that had been presented to members of the Executive Board relative to the manuscript. Consequently, the Board recommended that the report be recommended for acceptance, but approval was withheld on the preparation and distribution of the illustrated booklet mentioned therein, especially in its present form.

PRESIDENT HAGAN: Any question or dis-

cussion? DR. A. A. HUSMAN (N. Car.): I move we approve the action of the Executive Board.

DR. I. S. McADORY (Ala.) Second the motion. PRESIDENT HAGAN: Moved and seconded that the action of the Executive Board in respect to this report be approved. All in favor of the report say "aye"; opposed "no." The "ayes" have it. It is so ordered.

Report of Special Committee on Motion Picture Library

PRESIDENT HAGAN: Any questions about the report on Motion Picture Library? If I hear no objection, I will assume the report is approved. So ordered.

Report of Special Committee on Veterinary Service

PRESIDENT HAGAN: Finally, the Committee on Veterinary Services. This is our old Postwar Planning Committee that has been changed in name now to Committee on Veteri-

Service. Any questions or discussion nary about this?

DR. J. F. KNAPPENBERGER (Kan.): Mr. Chairman, paragraph 5 of this report makes some suggestion that something should be done regarding some of the rough spots in the abilof practicing veterinarians to get along with state and federal agents. That may be throw-ing up a red herring in the organization, but definitely it is something that should be studied, because those rough spots are there; we can-

not discount them, and I think we should do something about them. Some of the lay press have even been print-ing articles relative to some of the states' actions regarding some of the Bureau of Animal

Industry's recommendations.

I think we should make it a point to study some of those things and make some definite plans in the organization regarding the policy we should pursue in handling such conditions.

PRESIDENT HAGAN: Any other discussion? DR. JOHN MICUDA (Ariz.): On No. 4, regarding internship, I wish to heartily congratulate the committee on bringing up that matter. I have been instructed by our association that that has been a very good thing. I would like to make a motion that this be adopted as recommended.

PRESIDENT HAGAN: You are moving that

the report be adopted?

DR. MICUDA Yes.
PRESIDENT HAGAN: Is there a second to

the motion?

DR. E. A. GRIST (Texas): Second the motion. PRESIDENT HAGAN: The matter is open for further discussion, if anybody wishes to discuss Apparently there is none. I will ask you to vote. Will those in favor of the motion say "aye"; opposed "no." The "ayes" have it. It is so ordered.

Inasmuch as we will have to adjourn rather shortly because of the afternoon session, and since the next question may take some time, we will skip over the National Board of Veterinary Examiners and leave that for this evening.

Report of Special Committee on Enforcement of Code of Ethics

PRESIDENT HAGAN: Next is the Committee on Enforcement of Code of Ethics. Anybody wish to discuss this report? Any objection to adopting it as it stands? Hearing none, I will rule that it has been adopted.

Report of Joint Committee on Foods-AVMA and AAHA

PRESIDENT HAGAN: Next is the Joint Committee on Foods—AVMA and AAHA. Any questions or discussion on this report? Hearing no objection to its adoption, I will rule that the report has been adopted.

Report of Subcommittee on Veterinary Items, National Formulary Committee

PRESIDENT HAGAN: Any discussion on the Subcommittee on Veterinary Items, Nation Formulary Committee? If no objection, National will rule this has been adopted.

Report of Special Committee on Humane Act Award PRESIDENT HAGAN: Any questions or dis-cussion on the Humane Act Award? I will rule, hearing no objection, it has been adopted.

Report of Representative to the Horse and Mule Association of America

PRESIDENT HAGAN: We have reports from the representatives of a number of allied or-ganizations. First, the representative to the

Horse and Mule Association of America. Hearing no objection to it, I rule that the report has been adopted.

Report of Representative to Association of Honorary Consultants, Army Medical Library

PRESIDENT HAGAN: The Report of the Representative to the Association of Honorary Consultants, Army Medical Library. Don't hesitate to ask questions. No objection to this report? We will rule it has been adopted.

Report of Representative to the Inter-Association Council on Animal Disease and Production

PRESIDENT HAGAN: Next is the Report of the Representative to the Inter-Association Council on Animal Disease and Production. Hearing no objection, we will rule it has been adopted.

Report of Representative to the National Livestock Loss Prevention Board

PRESIDENT HAGAN: The Report of the Representative to the National Livestock Loss Prevention Board is next. Hearing no objection, we will rule it has been adopted.

Report of Representative to the Division of Biology and Agriculture of the National Research Council

PRESIDENT HAGAN: Representative to the Division of Blology and Agriculture of the National Research Council. There being no objection, we will rule it has been adopted.

Report of Representative to the National Research Council-Division of Medical Sciences

PRESIDENT HAGAN: Representative to the National Research Council-Division of Medical Sciences. Hearing no objection, I will rule it has been adopted.

Report of Representative to National Society for Medical Research

PRESIDENT HAGAN: Representative to the National Society for Medical Research. On this report I call your attention to the fact that there is a recommendation that the AVMA contribute the sum of \$200, which has been contributed for several years to the work of this group which is the organization which is publicizing the value of experimental work on animals.

Do I hear any objection to this report? If not, we will rule it is adopted.

Report of Representative to the U. S. Pharmacopoeial Convention

PRESIDENT HAGAN: Finally, the Renrasentative to the U. S. Pharmacopoeial Conven-tion. Hearing no objection to this, we will rule it has been adopted.

That leaves one report that I think we will

have to take up this evening.
DR. DENNIS COUGHLIN (Tenn.): Several questions have been brought up about the special committees. There is a world of new in-formation to be disseminated. So, I think some of these committees should be continued. that up to the incoming president, or should we make a motion to have some of these committees continued?

PRESIDENT HAGAN: Special committees are up to the incoming president. I think, how-ever, he might appreciate it, if you have some suggestions to make, he probably will be willto listen to them.

DR. COUGHLIN: This one on Public Relations, they call for a continuation of that—no, Food and Milk Hygiene Committee, I think the name should be changed to Public Health.

PRESIDENT HAGAN: In adopting the report, you have, of course, authorized those changes. DR. COUGHLIN: We took that up in the amendments. I think this Public Relations

PRESIDENT HAGAN: Public Relations is a standing committee. That will continue automatically. Do you mean the Veterinary Service Committee?

DR. COUGHLIN: Yes, the Veterinary Service Committee. That is a very important com-mittee and should be continued.

PRESIDENT HAGAN: I have no doubt that will be continued. However, the president does have authority. He could abolish it, if he saw fit.

It is almost twelve o'clock and, since the

afternoon session starts at one-thirty, we had better recess at this time. It makes a good stopping point.

Gentlemen, if it is your pleasure, we will adjourn at this time to meet again this evening at 7:90 p.m. in this room. Let's try to be prompt. If we are prompt, I hope we may be able to complete the work of the House today, and I am sure all of us would like to do that, if possible. Do I hear a motion to adjourn? DR. A. A. HUSMAN: (N. Car.): I move we

adjourn

DR. I. S. McADORY (Ala.): Second the motion. (The meeting recessed at 11:55 a.m.)



Second Session, House of Representatives August 16, 1948

The second session convened at 7:10 p.m.,

The second session convened at 7:10 p.m., President Hagan presiding.
PRESIDENT HAGAN: The House of Representatives will now come to order for the second session. We will begin by again calling the roll. Assistant Executive Secretary Klus-sendorf will call the roll.

Assistant Executive Secretary Klussen-

dorf called the roll . . .

Alabama .	Present
Arizona	Present
Arkansas	Absent
California	Present
Colorado	Present
Connecticut	Absent
Delaware	Absent
District of Columbia	Present
	Present
Idano Illinois Indiana Iowa Kansas Kentucky Louisiana Maine	Present
Indiana	Present
Iowa	Present
Kansas	Present
Kentucky	Present
Louisiana	Present
Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Montana Nebraska	Absent
Maryland	Present
Maggachusette	Present
Michigan	Present
Minnesote	Propent
Mississinni	Procent
Mississippi	Progent
Wontone	Present
Vehraeko	Present
Nevada	Present
New Hampshire	TICSCHIL
New Jareau	Present
New Jersey New Mexico	Present
Now York	Present
New York North Carolina	Present
North Dakota	Present
Ohio	Present
Ohio Oklahoma	Present
Oregon	
	Present Present
Phodo Teland	Present
South Canalina	Present
Pennsylvania Rhode Island South Carolina South Dakota Tennessee Texas	Present
Tennosses	Present
Texas	Present
Utah	
	Present
	Present
Virginia	Present
Washington	Present
West Virginia	Present
Wisconsin	Present
Wyoming	Absent
Army	Present
NAFV	Present
Canal Zone	Present
Alberta	Absent
British Columbia	Present
Manitoba	Absent
Ontario	Absent
Saskatchewan	Absent
Puerto Rico	Present

Report of Special Committee on National Board of Veterinary Examiners

Present

Cuba

PRESIDENT HAGAN: If you will turn to your preprints, we omitted this morning because of lack of time, a discussion on the National Board of Veterinary Examiners. Is there

any discussion or any questions about this report? The Chairman of the Committee, Dr. Krill, is here. So, if you have any questions, he can answer them. What is your pleasure

with respect to this report?

DR. I. D. WILSON (Va.): I move its adoption.

DR. C. D. VAN HOUWELING (Ill.): Second

motion.

PRESIDENT HAGAN: Dr. Wilson moves the

adoption. Are there any remarks?

DR. A. A. HUSMAN (N. Car.): I don't believe anybody could find any fault with it, I think DR. KRILL: Thank you.
DR. VAN HOUWELING: Mr. Chairman,

ally, when you accept something, you figure you have to take a little of the bitter along with the sweet. When I consider this report, when you accept something, you figure it looks to me like all we get with this is sweet. Each state can use whatever part they want to. There is nothing obligatory for them to use. There is nothing to lose and everything to gain. That is why we in Illinois are strongly in favor of it.

DR. M. R. BENSON (N. Dak.): Somebody has put in an awful lot of time on this, and it is well appreciated in North Dakota.

PRESIDENT HAGAN: Any additional discussion?

DR. TOM EVANS (N. M.): I have been usually in the opposition around here in everything ally in the opposition around here in everything I have said today, but I am not particularly opposed to this, whatsoever. I do know that our state is very much opposed to men retiring in other states and coming out to our place because of their health. I know, on that very point, our people wouldn't be very happy about this type of legislation. But, the state has to make its own laws, regardless of what we do here. I know that the medical profession has had this in operation a good many years. cannot see anything particularly wrong with it, myself. I do not see how it is going to be adopted in New Mexico right away. It might be, but it will just be in lieu of the semi-written examination. They will still have to go before our board and be passed on. That is the way it will be worked out. Due to the fact that we have a warm climate and a small state, I know the boys do not want men retiring and coming out and interfering. They don't want them at all if they are not going to take on all the work. That is just the situation. That is the only objection I could utter at all, and it

is no objection, really.

PRESIDENT HAGAN: Your board will still have control, as it will in every other state. Any more questions, or any further discus-

sion?

DR. P. G. MacKINTOSH (Wash.): My state told me to vote for this. I was in favor of it, and I am personally in favor of it, for many The veterinary profession, in the last reasons. ten, fifteen, or twenty years, has undergone quite a change. I have been on the examining

board for twenty-seven years.

In the early days, we had many troubles with empiries trying to pass a state board examina-tion. Not only that, at that time in our state any man could take the state board examination. He did not need to be a graduate of a veterinary college. However, that has been changed. A man taking an examination now has to be a graduate of an accredited veterinary college. The veterinary profession is progressing pretty fast. A young man who spends

five to six years in a veterinary college not only should be able to take this examination he should be more or less accepted in al-

most any state.

I think the sooner we have reciprocity in states, the better off we will be, providing the applicant from one state to another has good ethical standards and is of good moral char-acter. That is to be considered as much as anything else in the veterinary profession.

PRESIDENT HAGAN: Does anybody else wish to speak on this question? Are you ready to vote on it? All right, the motion is that this report be adopted. As I understand it, the adoption of the report will mean that the officers are empowered to proceed to set up such a Board. Will those who favor this motion say "aye"; opposed "no." The "ayes" have it. The motion is passed.

Dr. Krill, that represents the culmination of a lot of work on your part.

Inter-American Veterinary Congress

PRESIDENT HAGAN: Item No. 36 on the agenda is Inter-American Veterinary Congress. Dr. Simms is not in the room. He did, how-ever, present a report to the Executive Board yesterday on this matter, and I will ask Chairman Krili to give you the substance of the

DR. W. R. KRILL: I can't give you the full content of his report. There have been requests by some of the South American countries that there be an Inter-American Conference for veterinarians in the near future. As a result, Dr. Simms has been investigating some procedure by which a meeting of this kind could be arranged. It was suggested to him that the Food and Agriculture Organization of United Nations be requested to sponsor the an Inter-American meeting. That is going to be done. Dr. Simms was authorized by the Board to proceed along that line. Before anything is done, we will be notified, and you will get word of it. It is hoped that this meeting might be held in 1950. PRESIDENT HAGAN: This is merely pre-sented for your information. It requires no

action.

Fourteenth International Veterinary Congress

PRESIDENT HAGAN: The next item is the Fourteenth International Veterinary Congress in London, 1949. Dr. Hart is not here, either, but Dr. Hardenbergh is secretary of the American Committee, so, I am going to ask him to you the developments up to this time

EXECUTIVE SECRETARY HARDENBERGH: I will report very briefly. The Committee expects to have a meeting tomorrow afternoon. Several months ago, this United States com-mittee to cooperate with the organizing Committee for the London Congress Aug. 9 to 14, 1949, was appointed, and it has been doing a lot of work. We have had difficulty in getting the people in Europe and England to give us answers to some of the questions. However, we expect that in the very near future we can start publishing information about the International Veterinary Congress in London next year, so you people will have the information about it.

Veterinary Advisory Committee on Civil Defense Planning

PRESIDENT HAGAN: The next item is the Veterinary Advisory Committee on Civil De-fense Planning. Dr. Krill is Chairman, and he will give you a short report on the activities in that direction. Dr. Krill. DR. W. R. KRILL: In April, the AVMA was

requested to appoint a committee to work with an over-all medical committee in establishing a medical civilian defense program for the United States. It was felt that, in case of an-other national emergency, we should be pre-pared to handle the medical needs of this coun-In the present-day concept of in case of an attack upon this country, we certainly would need to marshal all our forces to take care of those needs.

As a result, an AVMA committee was ap

pointed to serve in an advisory capacity pointed to serve in an advisory capacity on civilian defense planning. The other members of the committee, besides myself, are Dr. Har-denbergh, secretary, and Drs. W. T. Oglesby, W. H. Riser, B. T. Simms, W. A. Hagan, and L. M. Hurt. The latter two are ex officie members.

Dr. Perrin H. Long, Johns Hopkins Univer-ty, who is chairman of the over-all Medical Advisory Committee on Civilian Defense Planning, called a meeting of the group in Washington on May 26, which I attended.

At this first meeting, there were representapractically of all fields of medicine: Brigadier General Hargraves, Air Surgeon's Of-fice; Colonel Stanley of the Army Surgeon General's Office; Captain Meyers, Navy Surgeon General's Office; Lieutenant Colonel Baltz, Navy General's Omee; Lieutenant Colonel Baltz, Navy Nurses' Corps; Dr. E. H. Cushing, Veterans' Ad-ministration; Dr. Keefer, Public Health Serv-lee; Dr. Daley, Federal Security Administra-tion; Dr. Snavely, Department of Interior; Dr. Crabtree, National Security Resources Board; Dr. Albright, Commissioner of Health of Alaska; Dr. Owens, National Research Coun-cil; Dr. Wilson, National Red Cross; Dr. Sen-senich, President of the American Medical Association; Dr. MacGowan, Catholic Hospital Association; Dr. Fischelis, the American Pharmaceutical Association; Dr. Camalier, American Dental Association; Mr. Johnston, Mr. Nance, Lieutenant Colonel Embers, Mr. Berry, Mr. Schaefer, all from the Office of Civilian Defense, and Dr. Perrin Long, Chairman.

This first meeting was largely a matter of out what the various branches had finding to contribute to an overall medical civilian defense program. One of the first things that I was asked was, where does veterinary medi-cine fit into a program of civilian defense? As chairman of the veterinary committee, I was somewhat at a loss, at first, to know just where veterinary medicine would fit into this program, but after talking it over with some of the committee members before I went down, I felt that the biggest function of veterinary medicine in a program of civilian defense is not so much meeting the emergency disaster conditions that might arise as a result of bombing. for example, but rather protecting one of our chief sources of food supply, namely, foods of animal origin, and seeing that those foods are fit for human consumption, as a means of maintaining the health and morale of the people.

Thinking in terms of the unconventional types of warfare which we may expect, in the event of another war, such as biological warfare, if something of that kind should take place in some of our heavily populated livestock areas, we could have widespread disease outbreaks among our flocks and our herds, which would require the marshaling of all our veterinary forces to work with the Bureau of Animal Industry in stamping them out. As I told you, the first meeting was largely

planning meeting, in getting the ideas of e different groups. At the second meeting, the different groups. plan of organization was set up. In that plan, the man heading up the over-all medical aspects of civilian defense will be a medical man. Under him will be three deputies. One of these deputies is to look after the disaster problems that might arise and is called the deputy chief in charge of medical care services. Under that deputy chief are the various consultants in the medical profession, the dental profession, the pharmacists, nurses and various groups of that kind.

The second group comprises the administrative services, having charge of the mobilisation plans, the training operations, evacuation hospitals, unit organization, personnel, supply requirements, and so on. Naturally, that is the larger phase of medical civilian defense planning.

Then there is a third proposed group, public health services. This has not yet been definitely decided. Under the public health service deputy, there would be one group for public health service, and another group for the veterinary services, which would work through the public health deputy.

We have requested that the veterinary services not come under the public health service deputy, but be set up as a fourth division, with a veterinary deputy chief in charge of it. That has been taken under advisement, and it may be set up in that way. At any rate, the work of the veterinary division is to be autonomous in its action and in its function. If this plan goes into effect, and in the event of an emergency, the chief of the Bureau of Animal Industry would appoint one of his staff members who is familiar with the work of the Bureau, to head up the veterinary services in the civilian defense program.

This deputy would have his regional and state deputies. Working through the state regulatory officials, we could organize our veterinary forces, see that they are properly trained, and given information in the control and handling of any situations that might arise. In the event of an emergency, veterinary forces could be moved into any area where needed. This deputy chief in charge could move them into an area and help instigate any procedures that might be necessary, through the complete coöperation of the civilian defense committee and the chief of the Bureau of Animal Industry. In short, it is a plan to utilize and mobilize our veterinary civilian forces to take care of any emergency that might arise in the event of an attack on this country, particularly one employing unconventional weapons.

This plan, as outlined, has been presented to the Office of Civilian Defense. There is no appropriation, at present, to put it into operation. There apparently is no need as yet, but the plan is there so that it can be implemented when and if the time should come.

I merely want to report to you, at this

I merely want to report to you, at this time, that we have been included in the medical civilian defense program. We have our program set up. We were very cordially received by the other medical groups, and they appreciate the part that veterinary medicine can play in an over-all medical civilian defense program program.

planning program.

Another thing that I should mention is that our committee was also given the task of supervising and looking after the problems connected with the deferment of veterinary personnel, veterinary students, and pre-professional students in connection with the present draft law. Just before I left Columbus, we had a request to meet with General Hershey in regard to the deferment of professional and preprofessional students. I was unable to attend but Dr. Simms, a member of the Committee, was there. A plan is being worked out

whereby veterinary preprofessional students will be given deferment on the same basis as the other medical and professional groups. We have nothing definite to report on that as yet. I am merely giving you this as a matter of information. It requires no action.

PRESIDENT HAGAN: Thank you, Dr. Krill.

PRESIDENT HAGAN: Thank you, Dr. Krill. Does any member have any questions about this matter? Dr. Krill states it is for your information only and requires no action, but if you have any questions, now is the time to bring them up.

There being none, I think we have completed the first 49 items of the agenda. There are certain ones on which no reports have been made, either because the persons are absent or because there is very little to report at this time.

Action on Proposals for Honorary Membership

We will go to item 50 at this time, action on proposals for honorary membership. You will recall that this morning the Executive Board recommended two persons for honorary membership. According to our By-Laws, this must be done in the first session, and action must be taken in the second session. We are at the point now when definite action should be taken.

Chairman Krill, will you again report the names of those recommended for honorary membership?

DR. KRILL: The two men who were named or recommended for honorary membership are Professor L. D. Bushnell, Kansas State College, and Professor Axel Salstedt of Sweden.

and Professor Axel Salstedt of Sweden.
PRESIDENT HAGAN: What is your pleasure
with respect to the recommendations?

with respect to the recommendations?
DR. A. A. HUSMAN: I move we approve
the recommendation of the Executive Board.
DR. P. G. MacKINTOSH: Second the motion.
DR. DENNIS COUGHLIN (Tenn.): Second

the motion.

PRESIDENT HAGAN: Dr. Husman moves that the recommendations be approved; seconded by Drs. MacKintosh and Coughlin. Are there any remarks on the motion? If not, will those who favor the motion say "ayo"; opposed "no." The "ayes" have it; therefore, these two men are duly elected to membership as honorary members of the AVMA.

Unfinished Business

Now we are down to the heading of unfinished business. Does any member know of any unfinished business that should come up at this time? In that case, we will move on.

New Business

Next is the item of new business, including invitations for annual convention. I wonder if we might leave the annual convention for the moment and come to it later.

the moment and come to it later.

Does any member have any item of new business to introduce at this time?

DR. W. T. OGLESBY (La.): As a matter of information, in connection with the report of the committee on a National Board, which was approved a few minutes ago, I presume the Executive Board has some idea as to when it will be started?

I think Dr. Krill felt possibly they would go ahead; at least they were thinking on this line. In view of that, since this body is not organized in any way, I wonder if there is any thought as to how this group will proceed to select the five men they are obligated to pick. All the other groups are organized. The AVMA has its Board as do all the other groups which are vosted with that responsibility. We are not organized. This group meets under the

jurisdiction of the president but, in the interim between sessions, we do not have any organ-ization. This National Board set-up gives a definite responsibility to the House. This is a

request for information.

PRESIDENT HAGAN: Dr. Krill, in the setting up of this National Board of Veterinary Examiners, the AVMA has five members to serve as part of the group. The question was raised, how is the AVMA to designate its representatives? Are they to be elected?

DR. OGLESBY: The section on practitioners says the House of Representatives shall select

five of them.

DR. KRILL: The House of Representatives elects five of them. I might say this, we did not know how this was going to go. We made no provision for an election at this meeting. I see no reason to rush into this thing just yet. want to take it upon yourselves to point those men now, I see no objection to it.

As I say, I had no idea whether the House of Representatives was going to pass this. I had hoped that they would. We purposely gave plenty of time for everyone to become fully familiar with what a National Board would mean. We did not attempt to rush so important a measure as this. We did not want anyone to feel that we were trying to force anything apon them or take away any liberties or rights from the respective states. We wanted to make sure that everyone was satisfied.

Now has been passed. Until this time we did not do anything further. We have set up the provisions as to who is to select the various individuals to serve on this Board. If would seem to me that, if you wanted to go ahead and do it at this time, all well and good; if not, if you would want to think the matter over and come up with some suggestions next year, that is all right. I don't know whether you men would feel in a position to go ahead and select your five members at this time, or whether you would want to wait a year. I think that is perfectly within your rights to decide what you may want to do.

PRESIDENT HAGAN: Since the question has been raised, perhaps a decision should be made by the House at this time as to whether or not you wish to proceed to elect these five rep-resentatives now or defer it. That would mean a year's deferment, wouldn't it? DR. KRILL: That would mean a year's de-

PRESIDENT HAGAN: What is your pleasure

with respect to this matter?

DR. P. G. MacKINTOSH: Wouldn't it be necessary for us to report back to our states

hefore taking this action?

PRESIDENT HAGAN: I should think, Dr. Mackintosh, what is happening here is that this organization is setting up another organwhich will proceed to incorporate itself and thereafter will be a separate organization from the AVMA. The AVMA is merely spon-soring this, to get it on its feet. It is pro-posing it. When these other organizations into it, as we hope they will, they then will have a group which will act autonomously in the future. It will be a self-perpetuating group.

Each group will elect according to the sug gestions made here, if the others agree to that procedure. So that I don't quite follow why it will be necessary to go back to your con-stituent organizations. Perhaps I am wrong in

DR. MacKINTOSH: The question in my mind was that all of the states did not know this would pass, and we probably were not given authority to pick different men; at least I was not.

PRESIDENT HAGAN: Of course, you are in the same position that everyone else is. No-body knew that this would pass. Since it has passed, will you be in any better position next year to do it than you are now? It will be done as a group.

DR. MacKINTOSH: Being Scotch, I would sort of like to think it over a little bit.

PRESIDENT HAGAN: That is within your province, if you want to postpone it.

A. GRIST (Texas): I would like to offer a motion that it be deferred until a year from now, and that a committee be selected from this group to select the personnel that might fill that bill and report back to us a year from now, for acceptance.

DR. Mackintosh: I will second the motion. PRESIDENT HAGAN: Dr. Grist moves and Grist moves and Dr. Mackintosh seconds that a committee this group be set up to act as a nominating

group.

DR. GRIST: That is right.

PRESIDENT HAGAN: And that the election of the members be held a year from now.

DR. GRIST: Yes: PRESIDENT HAGAN: That motion has been

seconded, and it is now open for discussion.

DR. OGLESBY: Since I started this, I think
I can say another word about it. I was not
trying to hurry this thing along but, as we look down the list, the Council on Education is organized. They can select the people want if this machinery would start working, but we are not organized. This motion, if passed, will put this group in position to carry out its assigned responsibility in selecting five practitioners.

DR. C. D. VAN HOUWELING: Dr. Grist, would you accept an amendment to give the committee from this group authority to appoint the members if necessary during the next. before the next meeting of this House year.

of Representatives?

DR. GRIST: I don't believe I would. (Laugh-

VAN HOUWELING: I was thinking DR. the thing would move along fast enough that you needed representatives from this group you needed representatives from this before the next annual meeting of the American Veterinary Medical Association, we would be the group that wouldn't have the representatives ready. I was wondering if we be the group that wouldn't have the representatives ready. I was wondering if we could make some provision for their election before next July, if that was necessary. If you can figure out another amendment to make, I think that would be more satisfactory. DR. GRIST: I would like to get the opinion

from the others. DR. I. D. WILSON: Mr. President, as I read it, the practitioners who are appointed need not necessarily come from this body. They are from the membership at large. Some here under the impression that they are to Some here are

elected from this body.

We select them from the DR. OGLESBY: AVMA membership.

PRESIDENT HAGAN: I believe you are correct in that.

DR. R. H. STEWART (Miss.): The states that kept their own system of examining and did not care for this, would those fellows be members to work on that committee?

DR. KRILL: To start with, there may not be any states that can accept a National Board, but I think we should try to select the men who could best serve on this Board, regardless of whether their states are cooperating or not. Let's have a Board that can do a good job. you have a good man in a state that is not

cooperating, I imagine you will have to pick some of those; maybe all of them will be from states that are not cooperating, to start with. Remember, it took medicine thirty-some years before all the states cooperated. I want to say this, that when I was in Washington working on the Civilian Defense program, they working on the Civilian Detense program, they were talking about chiefs to head up the various divisions, and I was surprised at the importance that the medical people attached to men who were diplomates of their particular specialties as a criterion of their ability and their fitness for the positions which they were

I think more and more, as this thing develops, we will regard it as one of the greatest steps forward that has been taken by this organization in a long time. I do not know of anything that is going to give a better index of the qualifications of a school than the record which its graduates make in a comprehensive examination, such as an examination of this kind should be. It certainly will point out the schools that are doing their duty and are giving the instruction which they should give. I

think it is a real step forward.

That is a little off the subject, but I would say, in selecting your men, select the outstanding men who can make a contribution to this Board, and let us start it off on a good sound basis.

DR. MacKINTOSH: Would you care to say something about the dental situation?

DR. KRILL: They are now beginning to develop. They got off to a rather poor start. I haven't seen the latest, but they were getting under way and were in pretty good shape the last I heard.

DR. A. A. HUSMAN: Mr. Chairman, I don't know what motion is before the House. As I read this it says, National Conference of State Veterinary Examining Boards. Who hauthority to call that conference?

DR. KRILL: State examining boards. Who has the

have an association of state examining boards. Junderstand you are having a meeting, aren't you, Mr. Past President?

DR. C. W. BOWER (Kan.): Yes, we have two

meetings DR. HUSMAN: I am in error. Elected by the National Board of Veterinary Examiners—when is that going to be? When do we finally decide we have a National Board of Veterinary Examiners, and when do they have authority to pick the other five members? I am asking

for information. DR. KRILL: The purpose of the five members to be appointed by the National Board of Vet-erinary Examiners, after the group we have listed here has been selected, they have an opportunity to organize. They may want men for certain specialties like nutrition and chemistry, and professors of that kind who may not be veterinarians, to help serve on that Board, and those will be elected by the other members on the National Board of Veterinary Examiners.

DR. HUSMAN: I am just trying to clear the atmosphere

DR. DENNIS COUGHLIN (Tenn.); Let's have that motion read again.

that motion read again.
... The motion was read....
DR. COUGHLIN: That is satisfactory but
shouldn't that be withdrawn and have it that the president name that committee? I don't see how the organization can name the committee.

DR. GRIST: He is the chairman. I assume

be will do his part.

DR. HUSMAN: Mr. Chairman, if the maker of that motion will accept this amendment, I would like to amend it to say that the chairman appoint that committee from this organ-

ization, to carry out what he intends to have

EXECUTIVE SECRETARY HARDENBERGH:

You mean the presiding officer?

DR. HUSMAN: The presiding officer?

PRESIDENT HAGAN: If the maker of the motion agrees to that, that will be done. I think that was the intention, that a group be

appointed and the presiding officer would necessarily have to do it. We will incorporate that in the motion, then, that the chairman of this group will name a nominating committee

will report back next year the list of nominees.
DR. H. D. CARTER (Ind.): We are not yet appointed for four years. We are not all to be here next year. How are you going to appoint a committee from the membership of this group,

if we will not be here?

PRESIDENT HAGAN: I think I can answer that question. Of course, you are a member at the present time. If I name that committee today or tomorrow, you are members now. you are not members next year, I do not think will make any difference anyway. You can serve on the committee. Unless somebody objects to that interpretation, we will proceed on that basis.

The question was called for.

PRESIDENT HAGAN: The question has been called for. Ready to vote? I don't want to shut off discussion if anybody has a question. Does everybody understand what they are voting on? If you do, we will not take any more time. I will ask all those who favor the motion to say "aye"; opposed "no." The "ayes" have it. That committee will be named before the

it. That committee will be named before the end of this session, and they will be expected to report to the group next year. Any further new business to be brought up?

(President Hagan appointed Drs. B. J. Killham, chairman, J. D. Gadd, F. J. Kingma, A. J. Wahn, and J. F. Witter.)

DR. R. C. SNYDER (Pa.): If not out of order, I would like to take advantage of this opportunity, with so many delegates present from the various constituent associations, to make a request from the Special Committee on Ethics request from the Special Committee on Ethics that the delegates request that each association appoint a committee on ethics through which national committee may function through the coming year. A good many of the associa-tions have already done that, but there are still a number to be appointed. Our committee would like very much to get this work under way, so that we have all forty-eight states with committees, with which we can correspond and through which we can function to carry out

our necessary work.

I would like to ask of the delegates here tonight that they take back that request, that their organization make the appointments.

PRESIDENT HAGAN: Delegates, please take

Any other matters of new business before

e go to the meeting of next year? DR. J. D. GADD (Md.): Why don't we have a Nominating Committee for selecting a president? All of our civic organizations, practically, and some of our leading foundations have them. It seems to me it is easy for pressure groups to select a president and be railroaded through, whereas many of our men are not rewarded, when they come up through the ranks as delegates, members of the Board of Governors, and so on. They are not given recognition. We can get some faddist, popular man, shoved through quite easily in some meet-

ings. This is not a recommendation but I would like to hear some discussion on it.

PRESIDENT HAGAN: There is no motion before the house, but if you would like to discuss the matter we can take some time for it.

Would anybody else like to discuss this question? Obviously, Dr. Gadd, the Constitution would have to be amended, but that could be done. It would originate in this group, if you or someone else wished to propose such an

amendment.

DR. A. A. HUSMAN: Mr. Chairman, I personally believe you could not improve any by having a nominating committee. In the little civic organization, where you have thirty or forty people, everybody knows everybody. I 'hink the most democratic way to do it is the way we are doing it now. I do not see any reason to are doing it now. I do not see any reason to change. I am just expressing a personal opinion. I know we might favor some more than others, but I believe, when we put it to the floor, all have an opportunity to express themselves. If they don't like it, they can get up and nominate whomever they like.

I do not believe there has been much railroading, any more than there would be if you had a Nominating Committee. That is just my That is just my

opinion.

DR. GADD: I feel that the job should seek the man and not the man seek the that reason, with a nominating committeethis is done by national organizations-there is not lost the opportunity of anybody introduc-ing somebody from the floor. It is just a

recommendation of a group.

DR. DENNIS COUGHLIN: I have been coming to conventions for a number of years. I cannot recollect when we have ever had a man Even if we had this nomwho wasn't capable. inating committee, there is still power to nominate somebody from the floor. I think we are doing very well. If any group does not like a man being put up, they have the right to put a man being put up, they have the right to put up another man, get out and work for him, elect him, if they can get enough votes. I think we are doing pretty well. DR GADD: May I answer that, too? I answer that in this way: I feel that in the past

some men have almost gone into national ofsome men have almost gone into national of fice (I am not speaking of personalities at all but you look over the history) almost cold, without going up through the ranks at all. I feel that this thing is big now, they should know something about the AVMA affairs, in-stead of going in cold. PRESIDENT HAGAN: Dr. Grist, do you have

say? something to

A. GRIST: I was thinking about the DR. E. nomination of officers today, and the few peo-ple who showed up for the nomination. I rather expect with a nominating committee there would be far more organization than today, because I do not think there were over two or three people in the room who had any who was going to be nominated for president-elect. I got no letters in the mail; I got no requests from anybody to be there and vote for anybody for office in this organization. To me, that is very healthy.

A nominating committee always leaves itself open to groups of all types to try to influence

its decision.

I think in this group, as long as I have been coming, it is not a dog-eat-dog thing when I get here. I do see, of course, there is excellent opportunity for an organized move at any time anybody desires to do so, but I think most veterinarians throughout the United States realize that any man who is placed in that position must have the time, the background, and so forth, to fill the bill.

We thought for a number of years of a possible president-elect from our state. Frankly, we have not found timber for it as yet, but

some day we will come forth.

I think with a nominating committee we might sometimes attempt a railroad job. I am

in favor of just leaving it as it is. In our own state organization, we know that those that are out, don't like it, and those that are in love it. (Laughter.) We have our difficulties in our own state organization on the election of officers. I wouldn't ever dare attempt a nominating committee with this kind of a democratic organization. I am afraid I would off. (Laughter.)

PRESIDENT HAGAN: As I stated a moment ago, Dr. Gadd, if you or others feel that a nominating committee would be preferable to our present arrangement, proceed to draw up some amendments to the Constitution and present them, and that will be the democratic way of deciding whether the group wants the new system or is satisfied with the old.

Any more discussion on this point, or shall

Any more discussion on this point, or shall we pass on? One other matter that has been overlooked until now is that of certain resolutions that were presented by the Committee on Resolutions. I will ask Dr. Klussendorf to read the resolutions that have been presented, and Dr. Krill, as Chairman of the Executive will report on the action taken by the Executive Board.

Report of Standing Committee on Resolutions

DR KLUSSENDORF: Resolution No. 1. Veterinary Relations with Other Groups.

WHEREAS, much progress on a national basis has been made toward an understanding of common problems between the AFMA and the AVMA through joint meetings and discussions of committees of the two associations; and

WHEREAS, there is great need of a similar understanding of the respective responsibilities of the veterinary profession, the pharmacy profession, and the industries engaged in the production, sale, and distribution of biological and pharmaceutical products in relation to their use in the prevention and alleviation of diseases of animals; and

WHEREAS, the professions of veterinary medicine and pharmacy and the industries en-gaged in the manufacture of the aforementioned products all perform functions important to the welfare of the livestock industry and the national economy, therefore be it

RESOLVED that the AVMA, through its officers and appropriate committees, seek to bring about an understanding and appreciation of the respective responsibilities of the veterinary profession, the pharmacy profession, biological and pharmaceutical industries they properly relate to the accurate diagnosis, the proper treatment, and effective prevention of diseases of animals so as to create and foster a better understanding between, and respect for, the related fields of veterinary medicine, pharmacy, and the biological and pharmaceu-

PRESIDENT HAGAN: Dr. Krill now will report the recommendation of the Executive Board on this resolution. DR. KRILL: That was approved by the Ex-

ecutive Board.

DR. A. A. HUSMAN: I move we approve the action of the Executive Board. DR. E. A. GRIST: Second the motion.

PRESIDENT HAGAN: It is now open for discussion. There being no discussion, I will ask you to vote. All in favor of this motion say "aye"; opposed "no." The "ayes" have say "aye"; opposed no.
it. The resolution has been adopted.
Resolution

KLUSSENDORF: Resolution No. WHEREAS, the release of helpful hints on the prevention and control of diseases of livestock are presented to the press of the nation through various channels and is generally

commendable; and

WHEREAS, frequently releases prepared for Middle West farmer consumption are not equally applicable in all areas of the nation with-

ally applicable in all areas of the nation without adjustment to local conditions; and
WHEREAS, those agencies within the state,
specifically charged by the laws of those states
with the control and eradication of certain diseases of livestock, at times are placed in an
embarrassing position because of the wording some releases; therefore be it

RESOLVED, that this body go on record as recommending the establishment of a central agent or committee in each state to whom releases could be sent in advance of their release and adjusted to local conditions before being given to the press.

DR. KRILL; being given to the press.

DR. KRILL: This resolution was disapproved. I would like for either Dr. Hardenbergh or Dr. Klussendorf to give the reason for it. They are more familiar than I am with the difficulty in getting these releases out, and the delay that would result, and the possible loss of news value as a result of it.

DR. KLUSSENDORF: Very briefly, this matter of getting out releases to the general press to the radio audiences is on a dated basis.

or to the radio audiences is on a dated basis, and, if one release gets out after the release date, the radio people simply will not use date, the radio people simply will not use it.
If we are going to issue releases on a nationwide basis, it will be necessary to do it on a
date basis, and if it needs to clear an extra
agency, it may be that as little as one-fourth
or even less of our present publicity material
will actually be used by the press and the radio.

We feel that one extra step will be a mechanical difficulty which will seriously impede the progress which we have been making along that line.

DR. P. G. MacKINTOSH: Does this mean all releases are going to be stopped or just par-tial releases in different states?

DR. KLUSSENDORF: According to the resolution, it would mean that all releases must go to some central agent within the state before they could be released within that state. DR. MacKINTOSH: Yes, but are you going to release news items anyway? DR. KLUSSENDORF: We have been doing

that through our Public Relations Department. We have releases which go to the state association. We have others which go to the radio stations. We have still others which go to the national press services. We have some that We have go to the larger city newspapers. releases that go to the country weeklies and to the extension agencies, and we have our AVMA press service, which is a monthly re-lease, which goes to the weeklies in towns of less than 10,000.

According to this resolution, I do not see where we could stop. All of those would have to clear through a state agency before we could release them. I think it would nullify

from 75 to 90 per cent of our effort,
PRESIDENT HAGAN: Understand that the
resolution was presented by the Committee on Resolutions, and you have been given the decision or the action of the Executive Board. What

is the pleasure of the House with respect to the adoption of this resolution? DR. A. A. HUSMAN: If the question is per-tinent, who prompted the request for that resolution? Did a number of states do it or

Dr. KLUSSENDORF: The resolution was submitted by the chairman of the committee, Dr. Hendershott, and he did not indicate how many people were sponsoring it, before it was released from his committee.

DR. MacKINTOSH: I move we abide by the action of the Executive Board.

DR. HUSMAN: Second the motion.
PRESIDENT HAGAN: Moved and seconded that we support the action of the Executive Board. Any discussion of the motion? in favor of the motion please say "ay posed "no." The "ayes" have it, which "aye": ophave it, which means that the resolution is killed.

DR. KLUSSENDORF: Resolution No. 3:

WHEREAS, many groups throughout the na-tion are concerned with livestock and poultry production and are vitally interested in obtaining accurate statistics on the causes of and incidence of animal morbidity and mortality;

WHEREAS, such information is of paramount importance in showing 'the need for more and importance in showing the need for more and better trained veterinarians, for more research in animal diseases, for better programs of con-trol of these diseases, and for widespread sup-port to meet these needs, and for the expan-sion of veterinary services; therefore, be it

RESOLVED, that the AVMA urge its members keep accurate records and render, upon reto keep accurate records and render, upon request, reports to the properly constituted agencies (state and federal livestock sanitary officials), and that the JOURNAL of the Association continue to stress the need for cooperation by all veterinarians along the lines indicated.
DR. KRILL: I might say that this is a reso-

the Executive Board felt was a which good, ideal thing to have done by the veteri-narians. Whether or not it will bring much action on their part, we do not know, yet we felt that it should be approved and so voted.

PRESIDENT HAGAN: What is the pleasure of the House with respect to this resolution? DR. A. A. HUSMAN: I move we approve the action of the Executive Board.

DR. I. S. McADORY: Second the motion. DR. J. N. CAMPBELL: I would like to ask question. Do you mean all diseases or in-

fectious diseases, or contagious diseases?
DR. KLUSSENDORF: Throughout th Throughout these resolutions you will notice that they are lack-ing in specificity and some of them are gram-When they were discussed matically incorrect. in the Executive Board it was voted that they should be subject to clarification and editing. I think that in this instance it was the in-

fectious or transmissible diseases that aimed at.

DR. CAMPBELL: In the state of Minnesota they can obtain that information from our livestock sanitary boards. They will never get it from the practitioners.

PRESIDENT HAGAN: Where does the sani-tary board get the information?

DR. CAMPBELL: From the practitioner.
PRESIDENT HAGAN: You are doing the
thing that is asked for here. That is not done in all states.

Any further discussion? Will those in favor the motion say "aye"; opposed "no." The of the motion say "aye"; opposed "no." "ayes" have it. The resolution is adopted.

DR. KLUSSENDORF: Resolution No. 4: WHEREAS, during the year just passed, the Association has lost by death a number of valued members, many of whom had served the Association in various capacities and whose efforts had contributed much to the advancement of Association activities and the betterment of its program, and

WHEREAS, the passing of these valued members has engendered in us a deep feeling of loss, therefore, be it

RESOLVED, that we hereby express our sorrow, and extend our sincere sympathies to the families of the deceased; furthermore, that this resolution be spread in the minutes of this meeting and published in the official proceed-

DR. B. J. KILLHAM: I move the adoption. DR. P. G. MacKINTOSH: Second the motion. PRESIDENT HAGAN: You heard the motion. Those in favor say "aye"; opposed "ayes" have it, and it is so ordered.

DR. KLUSSENDORF: Resolution No. 5:

WHEREAS, the AVMA in convention assembled for its Eighty-fifth Annual Meeting in San Francisco has experienced one of its most outstanding sessions, both in general interest and attendance, and

WHEREAS, the success of this convention is due to the unstinted efforts of many groups,

agencies, and individuals, therefore, be it RESOLVED, that this Association express its sincere appreciation and thanks to all of those whose planning of and participation in the convention contributed so much in hospitality, courtesles, and enjoyment for all who attended the sessions and convention functions, and be it further

RESOLVED, that this resolution be spread in the minutes and published in the official pro-ceedings as a measure of thanks to each and all of the participating groups and individuals, especially the following:

The Committee on Local Arrangements, The California state and local veterinary associations.

The Committee on Program, The San Francisco Convention and Tourist Bureau.

The hotel managements, The commercial exhibitors, The educational exhibitors,

The newspaper and radio services.

PRESIDENT HAGAN: What is your pleasure with respect to this resolution?

DR. A. A. HUSMAN: I move its adoption. DR. I. S. McADORY: Second the motion.

PRESIDENT HAGAN: It has been and seconded that this resolution be adopted. Any remarks? All in favor of the motion say "aye"; opposed "no." The "ayes" have it. It is so adopted.

DR. KLUSSENDORF: Resolution No. 6:

WHEREAS, the dread foot-and-mouth disease of livestock continues as a threat to the livestock of the United States, particularly since it exists in Mexico, and

WHEREAS, the laws of the United States enacted by Congress are designed to protect the health of our livestock against the introduction of any animal from a country in which certain infectious diseases are known to exist, and

WHEREAS, only impartial and firm administration of the laws will permit the will of Congress and of the people of the nation to be

carried out, be it therefore

RESOLVED, that the AVMA, in convention assembled, convey to the Secretary of State, the Secretary of Agriculture of the United States, and the Chief of the United States Bureau of Animal Industry our unqualified support for the strict enforcement of both wording and intent of all laws and regulations intended to protect the health of the animal life of the nation.

PRESIDENT HAGAN: What is your pleasure

with respect to this resolution?
DR. KRILL: This was approved.

DR. A. A. HUSMAN: I move we approve the action of the Executive Board.

DR. I. S. McADORY: Second it. PRESIDENT HAGAN: Dr. Husman moves

that we approve the action of the Executive Board. Any remarks? Those in favor say "aye"; opposed "no." The "ayes" have it, and it is so ordered.

DR. KLUSSENDORF: Resolution No. 7:

WHEREAS, poorly supervised endurance races for horses have been held in certain states on various occasions, and

WHEREAS, some endurance horse races have been of such a character as to cause the ex-haustion and collapse of many of the horses entered, and even the death of several such horses, and

WHEREAS, the Governor and State Veterinarian of Wyoming during this past year found it necessary to stop such contests in their state, and

WHEREAS, unsanctioned or poorly super-vised endurance horse races of this character afford no apparent benefit to horse breeders or to animal industry generally, now, therefore be it

RESOLVED by the American Veterinary Medical Association in convention at San Francisco, California, this 16th day of August, 1948, that it is opposed to endurance horse races that are unnecessarily exhaustive and sometimes cruel, and, furthermore, that it commends Governor Lester C. Hunt and State Veterinarian Dr. G. H. Good for their humanitarian action in stopping such contests in Wyoming.

DR. P. G. MacKINTOSH: I move the adop-tion of that, regardless of the action of the Executive Board, (Laughter.)
DR. KRILL; The Executive Board approved

that. DR. R. H. STEWART (Miss.): Second it. PRESIDENT HAGAN: Moved and second

Moved and seconded

that this resolution be adopted.
DR. A. A. HUSMAN: I believe the Army has bred half-breed horses and put them through endurance races. If a man enters any horses that are not fit to be put in an enters any norses that are not fit to be put in an endurance test, he should be prosecuted; but there are some of those horses that can still stand many of the endurance tests they are put to. I don't know that this Association should go on record as telling any registry association or anybody else, if they want to run certain of those That is the way I feel about it, personally. DR. DENNIS COUGHLIN: This isn't an en-

durance test; it is an endurance contest.
PRESIDENT HAGAN: Any further discus-

sion?

DR. P. G. MacKINTOSH: The Army contests have always been under strict supervision. contests we have seen in the Pacific Northwest have been terrible. I am strictly in favor

this resolution.
PRESIDENT HAGAN: Ready for the ques-PRESIDENT HAGAN: Ready for the ques-tion? Those who favor the motion, which is to adopt this resolution, will say "aye"; op-posed "no." The motion is carried. This is a final call for any new business be-fore we proceed to the last item, so far as I

know. Does anybody have any matter of new business to bring up? In that case we will move on to the matter of invitations for the annual convention in 1950. The one next year is settled; 1950 is the one we are discussing now

will ask the secretarial staff if they will I present the invitations that we have before us.

Dr. Klussendorf.

Invitations for 1950 Annual Convention

Dr. Klussendorf read the file of correspondence in connection with the invitation from Miami Beach.

DR. KLUSSENDORF: So much for Florida.

We move now to Texas.

Dr. Klussendorf read the file of correspondence in connection with the invitations from San Antonio and Houston, Texas.

PRESIDENT HAGAN: Thank you, Dr. Klus-

It seems to me that we ought at this time to hear anyone who cares to speak about one or the other, or any one of the three invitations. You really have three: San Antonio, Houston, and Miami Beach.

I take it that everyone understands that the

meeting in 1950 must, according to our rotation plan, be in Zone 3, which means the southern states including the state of Texas.

Dr. Grist, would you like to amplify the re-

marks in your letter?

DR. E. A. GRIST: It is without apology that I would like to say a few things about the state of Texas. (Laughter) It is a shame, in a way, to have to talk about Texas in the same vein that Florida has tried to present in its in-It is also a shame to have to talk vitation. Texas after having been to California. hter.) We have a great deal to offer, as about (Laughter.) you no doubt have heard many times, but it is rather unique that we do have two towns that are particularly interested in having the AVMA meeting in the state of Texas, and, to cap the climax, we have a third that is interested.

The city of San Antonio, of course, is interested in summertime business. I say that because it is in defense of Florida's ambition to have it. They also would like very much to

have some summertime business.

Both towns, that is Miami Beach, Fla., and San Antonio, Texas, Antonio, Texas, are winter resort towns, will grant you that. We will not go into elaborate discussions about summertime temperature (laughter) because it would be rather foolish to tell you the temperature in those towns in the summertime.

About all we can offer in defense is that we have air-conditioning and we know how it works, and we use it in everything.

The unique summertime temperature. however, offers many of the advantages that we have been able to see in this state, flowers, vegetation, and so forth, that will be found

that season of the year.

The one great advantage of the city of San ntonio is its entrance into the country of Antonio is country of Mexico. I have had a great deal of pleasure in contacting the various groups, for this invitation, and being with the Mexican officials. We have gone so far as to think in terms of a similar postconvention meeting as has been planned here for the island of Hawali. Mexico, we know, of course, has it all over all of us from the standpoint of playing host.

The Mexican railway officials, and others, are interested in planning any side tours that

anyone might desire.

San Antonio, on the airline basis, is only a matter of two or three hours from Mexico City; on the rail basis, approximately a day and onehalf.

I mention all of these things because, from the standpoint of accommodations, we do not have to substantiate that; we do have it. Large syndicates or chains of tourist courts have moved into that section of the state, and they have some that will surpass any hotel accommodations.

Most of us, if we do any traveling at all, appreciate having the automobile at our fingertips and being able to go in and out as we see

fit.

The one disadvantage that I can see at the moment would be in an auditorium meeting. I do not think any of us relish the idea of an auditorium meeting any time, if we can avoid it; hotels offer so much more pleasant surroundings. We do not have to move back and forth from place to place. It is not a draw-

back in San Antonio, because the auditorium is completely air-conditioned, or will be.

Bus service is supplied by the transit comin that town, that will move you back

and forth at any time, to your hotel.

The local organization, that is the Bexar County or San Antonio Veterinary Association, is very anxious to play host to the 1950 meeting of the AVMA. So much for San Antonio.

Houston is equally interested. Our good state

of Florida mentioned their hotel management. In the development of the new McCarthy or Shamrock Hotel, we went to the Waldorf-Astoria in New York and hired their manager, and he is on the job. (Laughter.) Mr. Sieg-fried, who used to be manager of the Palmer House in Chicago, is now our business manager in the Shamrock Hotel. So, from that stand-So, from that standpoint, I think we are well equipped.

There is a rather unique situation existing in the city of Houston. We know that California could not get along very well without Howard Hughes, and he is a part of the city of Hous-ton. He owns a great section of that town, with his tool companies and his oil interests.

Many of us would be in financial straits today if it had not been for Jesse Jones and the RFC, and some of those branches in Washington, and Houston happens to be his home. He owns the leading hotels. He looks up and down the main street and admires it, quite frequently.

In addition, we have Glenn McCarthy who recently came into the multimillionaire classifica-tion, and he is building the Shamrock Hotel, 1,100 rooms air-conditioned from basement to ceiling, a \$26 million hotel, even equipped with television. He has his own radio station, shopping center, and motion picture. He has over \$4 million tied up in a garage, alone. He has five stories in the garage, that will accommodate 1,400 automobiles each night, each floor with three acres of floor space.

was startled in wandering through the l, as it is nearing completion. They offer unlimited possibilities for a convention of this

type.

You note from the elaborateness of the intation that Houston is a town that we would all enjoy visiting. It is not a coast town, in the true sense of the word; it is on a ship channel some 50 ml. inland from Galveston.

We know we need rain, but the only way we get it is for a gulf storm to originate in Florida and come blowing over our way. and come blowing over our er.) So, there are some advantages in August, (Laughter.) being a little away from the coast in August, in that state.

We, of course, can offer any side trips to the gulf, if anyone desires to see the water. the Medical Center in Houston are well worth anybody's time, in such a visit. There will soon be one of the largest medical centers in the world in the city of Houston. It has been endowed by numerous individuals.

We are even planning an office building that will be just a little taller than the Empire State—144 stories. I offer this without apology, because it is true. But Houston does offer a number of possibilities. It would be difficult number of possibilities. It would be difficult for me to say what the hotels will charge you, because in 1950 some of us may not be able

to go.

But we also remind you that in Cincinnati, in the House of Representatives, we offered an invitation to come to the city of San Antonio to celebrate the eradication of foot-and-mouth disease in Mexico. I do not know whether we will make it; the prospects are fairly bright. I have tried to offer you San Antonio and

Houston and I would also like to offer Dallas. You know, we have several towns in Texas. of course, we consider Dallas the big city. It is on major airlines. The accommodations for rail and air are excellent. They offer two hotels, across the street from each other, that accommodate most of us; both are airconditioned throughout and provide restaurants, garages, and food. A wonderful place to come for such a convention.

I want you to feel that the state of Texas wants you. We have three towns that will take you, and I believe that will best Florida just

PRESIDENT HAGAN: Thank you, Dr. Grist.
I don't see any more Texans here, so I take
it we have the Texas story.
Does anybody want to speak about Florida?

DR. J. V. KNAPP (Fla.): Thank you, Dr. agan. Dr. Ramsey, as perhaps you observed Hagan. from the reading of the invitation, is president of our association and a delegate to this House of Representatives. I am alternate. He wired me in Los Angeles the other day that, on ac-count of his health, he could not be here and asked me to present, on behalf of the Florida State Veterinary Medical Association and the South Florida group in Miami, the invitation which was read. That is cordial and sincere. Due to the short notice that I had of this, I

was not able to bring any knickknacks along, not even coconuts. If you boys are interested, you can shinny up a tree and gather what you

want. (Laughter.)
We have a lot of things outside of those listed in the letters of invitation, that I think

you would find interesting.

I have just returned from Mexico, as a side trip. It is interesting, but we have Cuba right to the south, and closer than the city of Mexico by air or by boat. I think you will enjoy that. We do not do things in quite as big a way, nor do we have as big a state as Texas, but we do have the beach, and it offers a variety of sports to those who are interested in the sand or the water, or the elephants which play up and down the beach.

If you are allergic to sand or ocean water, of course, you can go over to Miami proper, and there is a battery of hotels that will suit you

in size and appointment.

If you are interested in fishing, there is the most wonderful sport fishing in the world off Miami Beach. I know to some of you that would be an attraction. There are other attrac-But I would like to leave this retions there. But quest with you.

I understand that the Association sends representative to the cities that are being considered. I would like to suggest that the representative come in August and make his observation of both places, and then decide which place will accommodate you to your greatest comfort and advantage.

I thank you. PRESIDENT HAGAN: I am glad you brought up the last point. I was going to point out that it has been customary in recent years to send one member from the central office to the city under consideration, in order to survey the facilities available.

Actually, holding a meeting of this type, as most of you can appreciate, is a fairly complicated situation, and there are many details that casual observation will not bring out. It is more or less a professional job to select a place that will work out reasonably well for

I was going to suggest to the House that, Whatever action is taken, be coupled with some provision of this type and be made conditional upon satisfactory findings by the central office staff.

According to our administrative By-Laws, the invitations must be presented two years in advance, and the House of Representatives makes the decision as to the meeting site. Therefore, if I understand it correctly, this House should make the decision now. It could, however, delegate the authority, I presume, and I think it has in the past, at times, but what you wish to do is up to you to decide.

The matter is now open for discussion. What is your pleasure with respect to the meeting

for 1950?

DR. A. A. HUSMAN: Mr. Chairman, there has been no survey made, as I understand it. PRESIDENT HAGAN: I was just talking to Dr. Hardenbergh. No survey has been made of the cities except Dallas which was surveyed in 1944. There is no information about the other cities at the present time except what has been

given here. DR. HUSMAN: I would like to move that the main office be empowered to make a survey, and that we abide by the decision as to which

is the best place to hold that meeting. We talk about no survey being DR. GRIST: Dr. Hardenberg has prepared a very excellent brochure, or whatever you might call it, on planning a convention. We took his procedure, sat down in group meetings and went over, item by item, the requirements for an AVMA meeting. On the exhibit space, and things of that nature, we can offer all the accompositions commodations necessary. In this large hotel in Houston, they have the exhibit space equipment already built and stored in the basement. They are planning for the Texas Dental Convention in May with 124 exhibits, and those are already built. The hotel offers that space and already built. equipment, plus light, for \$25. I don't think you will find anybody that will beat that, anywhere in the U.S.

DR. DENNIS COUGHLIN: Isn't there a mo-

tion before the House?
PRESIDENT HAGAN: I didn't understand he

made a motion.
DR. HUSMAN: I made a motion that it be left to whomever the Association would delegate at the main office to go and investigate, and leave it to his judgment.

DR. COUGHLIN: I will second that motion.
PRESIDENT HAGAN: I wonder if the Executive Secretary would like to speak on this

matter?

HARDENBERGH: DR. I don't think should leave the final decision to one individual. COUGHLIN: He said a member or a committee

DR. HARDENBERGH: If you want to delegate the authority to make the final decision, to the Executive Board at its winter session, I would not see any objection to that, based upon investigations in the meantime.

DR. HUSMAN: I will accept that. want to leave it to someone, after the investi-

gation is made.

PRESIDENT HAGAN: I am not quite clear, myself, exactly what the motion is before the Inasmuch as this was rather confused, House. I wonder if you would mind restating your motion.

DR. HUSMAN: I move that a proper survey be made by the Association, and that the final decision be left to the Executive Board at

their winter meeting.

DR. COUGHLIN: To cover these four towns?
DR. HUSMAN: Any town that has applied.
DR. COUGHLIN: Dr. Husman, why not confine that to two cities? That would be a big job

PRESIDENT HAGAN: As I understand your motion, it would mean they would have to survey all four towns. Is that your intention?

DR. HUSMAN: Yes, unless this aggregation says they want to select two.
PRESIDENT HAGAN: You have the right

to make the motion, if that is your intent.

DR. HUSMAN: I made the motion. If anybody wants to offer an amendment to select
two towns, that is agreeable and I will accept the amendment, but I want a survey made.
PRESIDENT HAGAN: Is there a second to this motion?

DR. JOHN MICUDA (Ariz.): Second the motion.

PRESIDENT HAGAN: The matter has been moved and seconded. Therefore, it is open for discussion.

DR. J. F. KNAPPENBERGER (Kan.): seems to me that this organization is getting entirely undemocratic in a lot of its policies. We leave too many decisions of the organization to too few men. We have asked for in-

tion to too lew men. We have asked for invitations to these meetings.

The people who have made those surveys have apparently spent quite a lot of time on this. They are not fly-by-night operators. I do not see why we cannot trust our judgment. as much as we can some other people's judgment.

I think the meeting place should be one little thing that the House of Representatives should decide on, taking into consideration that in the last three years we have been to extremes, as far as decentralization of meetings is concerned: first in Boston and then in San Fran-cisco. Taking into consideration that the center of the veterinary population is a along way from either one of them, I think we should select the meeting place. I firmly believe that select the meeting place. I firmly believe it should be decided by this organization. have ample proof from these gentlemen of high caliber, of their survey, and I can see no reason for duplicating that survey.

PRESIDENT HAGAN: Is there any discussion on the question? The motion of Dr. Husman's is that the surveys be made of the four cities who have extended invitations, and that the decision be delegated to the Executive Board following the report of the examination. That is correct, is it?

DR. HUSMAN: Yes.

PRESIDENT HAGAN: Anyone wish to discuss this further? Ready to vote? All who favor this motion will say "aye"; all opposed "no." I think the "ayes" have it. PRESIDENT HAGAN:

DR. KNAPPENBERGER: I would like to

vote. call for a

PRESIDENT HAGAN: The decision of the Chair has been appealed from. I would like to ask all those who favor this motion to stand. Dr. Knappenberger, do you want a weighted vote, or are you satisfied with a standing one? Do you want a roll call?

DR. KNAPPENBERGER: I think it ought to be. PRESIDENT HAGAN: Be seated. We will

have to call the roll.

As your state is called, will you vote "yes or "no." Dr. Klussendorf will call the roll.

. . . Dr. Klussendorf called the roll. . . State No response Yes Alabama Arizona x Arkansas California × Colorado x Connecticut X Delaware X of Columbia Florida Georgia x Idaho Illinois Indiana × Iowa x

Kansas			x
Kentucky		x	-
Louisiana			x
Maine	x		-
Maryland	-		x
Massachusetts		×	x
Michigan		-	x
Minnesota		x	-
Mississippi		x	
Missouri		x	
Montana			x
Nebraska			x
Nevada			x
New Hampshire	x		
New Jersey		x	
New Mexico			x
New York		x	
North Carolina		x	
North Dakota		x	
Ohio		x	
Oklahoma			x
Oregon			x
Pennsylvania			x
Rhode Island		x	
South Carolina		x	
South Dakota			x
Tennessee		x	
Texas			x
Utah			x
Vermont		x	
Virginia		x	
Washington			x
West Virginia			x
Wisconsin		x	
Wyoming	x		
Army			x
NAFV		X.	
Alberta	x		
British Columbia			x
Manitoba	x		
Ontario	x		
Saskatchewan	x		
Canal Zone			x
Puerto Rico		x	
Cuba .		x	

DR. HAGAN: Dr. Klussendorf will announce the result of the vote

DR. KLUSSENDORF: There were 124 votes cast; of those, 71 are "yes."
DR. HAGAN: The motion carries.

Invitation for 1951 Annual Meeting

PRESIDENT HAGAN: I understand Dr. Boyd would like to speak with reference to the

1951 meeting. Dr. Boyd, would you like to take the floor for a few minutes?

DR. W. L. BOYD (Minn.): Thank you, Mr. Chairman. We are very much interested in Minnesota for a meeting there in 1951. I haven't anything concrete to offer at this time. We have not progressed that far. I think it will have to come before our state society before we can offer a definite invitation.

I did want to take this occasion to bring it to your attention and have you think of us for 1951. There is a growing interest on the part of Minnesotans to have this organization meet in Minneapolis in 1951.

DR. E. F. SHEFFIELD (Calif.): How about temperature?

DR. BOYD: There may be a few who re-

member Minneapolis twenty years ago.
PRESIDENT HAGAN: That seems to dispose of that matter. Is there any other business to be brought up before the House proceeds to adjourn?

DR. HUSMAN: I move we adjourn.
DR. McADORY: Second the motion.
DR. HAGAN: It has been moved and seconded that we adjourn. Those in favor signify by saying "aye"; opposed "no." It is carried. . . . The meeting adjourned at 9:15 p.m. . . .

Official Roster, 1948-1949 American Veterinary Medical Association

Officers

- L. M. Hurt, President,, 203 Administration Bldg., Union Stock Yards, Los Angeles 11, Calif.
- C. P. Zepp, Sr., President-Elect, 136 W. 58rd St., New York, N. Y.
- Brig. Gen. J. A. McCallam, 1st Vice-President, Veterinary Division, Office of the Surgeon General, Dept. of the Army, Washington 25, D. C.
- R. C. Dunn, 2nd Vice-President, School of Veterinary Medicine, Texas A. & M. College, College Station, Texas.
- R. S. Sugg, 3rd Vice-President, College of Veterinary Medicine, Alabama Polytechnic Institute, Auburn, Ala.
- E. F. Johnston, 4th Vice-President, Box 44, Carp, Ont.
- L. J. Goss, 5th Vice-President, New York Zoölogical Park, New York 60, N. Y.
- J. G. Hardenbergh, Executive Secretary, 600 S. Michigan Ave., Chicago 5, Ill.
- R. C. Klussendorf, Assistant Executive Secretary, 600 S. Michigan Ave., Chicago 5, Ill.
- W. A. Young, Treasurer, 157 W. Grand Ave., Chicago 10, Ill.

Executive Board

- W. R. Krill, Chairman, 2656 Tremont Rd., Columbus 8, Ohio. (1949).
- A. L. MacNabb, 1st District, Ontario Veterinary College, Guelph, Ont. (1952).
- S. F. Scheidy, 2nd District, 943 Turner Ave., Drexel Hill, Pa. (1953).
- O. Norling-Christensen, 3rd District, 720 Hib-
- bard Rd., Wilmette, Ill. (1953). B. E. Carlisle, 4th District, Camilla, Ga. (1949).
- C. C. Franks, 5th District, 1133 44th St., Des Moines, Iowa. (1950).
- N. J. Miller, 6th District, Box 335, Eaton, Colo. (1951).
- E. E. Wegner, 7th District, State College of Washington, College Station, Pullman, Wash. (1950).
- W. G. Brock, 8th District, 110 Exposition Ave., Dallas 1, Texas. (1951).
- *B. S. Killian, 9th District, 8 MacArthur St., Somerville, Mass.
- W. R. Krill, 10 District, ibid.
- *Temporary appointment until election is completed to fill vacancy.

- L. M. Hurt, ex-officio, 203 Administration Bldg., Union Stock Yards, Los Angeles 11, Calif.
- C. P. Zepp, Sr., ex-officio, 136 W. 53rd St., New York, N. Y.
- W. A. Hagan, ex-officio, New York State Veterinary College, Cornell University, Ithaca, N. Y.

Board of Governors* (Ex-Officio)

- W. R. Krill, Chairman; L. M. Hurt, C. P. Zepp, Sr.
- *The Board of Governors is also ex-officio, the Committee on Journal for the Association's publications.

Editorial Staff

J. G. Hardenbergh, Managing Editor; L. A. Merillat, Editor-in-Chief; R. C. Klussendorf, Associate Editor; Helen S. Bayless, Assistant Editor.

Associate Editors

- F. R. Beaudette, Poultry Diseases, New Jersey Agricultural Experiment Station, New Brunswick. N. J.
- R. R. Birch, Research, New York State Veterinary College, Cornell University, Ithaca, N. Y.
- J. A. Campbell, Diseases of Captive Wild Animals, 2722 Yonge St., Toronto, Ont.
- L. J. Goss, Diseases of Wildlife and Fur Bearing Animals, New York Zöological Park, 185th St. and Southern Blvd., New York, N. Y.
- W. F. Guard, Surgery and Obstetrics, The Ohio State University, Columbus 10, Ohio.
- G. W. Jensen, Cattle Practice, Antioch, Ill.
- H. W. Johnson, Large Animal Medicine, Veterinary Hospital, Colorado A. & M. College, Fort Collins, Colo.
- Brig. Gen. J. A. McCallam, Military Veterinary Medicine, Veterinary Division, Office of the Surgeon General, U. S. Army, Washington 25, D. C.
- A. Merchant, Public Health, Iowa State College, Ames, Iowa.
- J. A. S. Millar, Small Animal Medicine, Box, 318, Deal, N. J.
- R. E. Rebrassier, Parasitology, Veterinary Clinic, The Ohio State University, Columbus 10, Ohio.
- B. T. Simms, Sanitary Science, Bureau of Animal Industry, U. S. Department of Agriculture, Washington 25, D. C.
- F. H. Suits, Swine Practice, Odessa, Mo.

Section Officers*

- GENERAL PRACTICE.—E. A. Erickson, Chairman, 314 N. Bostwick, Charlotte, Mich.; A. G. Madden, Secretary, 7242 Miami Ave., Madeira, Ohio.
- PUBLIC HEALTH.—L. W. Rowles, Chairman, City Bldg., Topeka, Kan.; Alexander Zelssig, Secretary, 305 Oak Ave., Ithaca, N. Y.
- Research.—O. W. Schaim, Chairman, School of Veterinary Medicine, University of California, Berkeley; C. C. Morrill, Secretary, College of Veterinary Medicine, University of Illinois, Urbana.
- SMALL ANIMALS.—S. R. Elko, Chairman, 13125 Hamilton Ave., Highland Park, Mich.; Harry B. Roberts, Secretary, 1300 W. 117th St., Cleveland 7, Ohio.
- POULTRY.—W. R. Hinshaw, Chairman, School of Veterinary Medicine, University of California, Berkeley; C. H. Cunningham, Secretary, School of Veterinary Medicine, Michigan State College, East Lansing.
- Subserv and Obstetrics.—C. Harvey Smith, Chairman, Route 1, Crown Point, Ind.; E. A. Woelffer, Secretary, College of Veterinary Medicine, University of Illinois, Urbana.

Women's Auxiliary

- Mrs. A. E. Bott, President, 6 Wilson Road, Country Club Place, Belleville, Ill.
- Mrs. B. H. Miller, 1st Vice-President, Charleston, W. Va.
- Mrs. Dennis Coughlin, 2nd Vice-President, Knoxville, Tenn.
- Mrs. H. W. Ayers, 3rd Vice-President, Oklahoma City, Okla.
- Mrs. H. S. MacDonald, 4th Vice-President, Toronto, Ont.
- Mrs. C. L. Miller, Secretary-Treasurer, 348 Forest Ave., River Forest, Ill.

House of Representatives

- Mrs. Floyd H. White, Chairman, San Rafael, Calif.
- Mrs. C. E. Bild, secretary, Miami, Fla.

Standing Committees

Budget (Ex-Officio)

- L. M. Hurt, Chairman, 208 Administration Bldg., Union Stock Yards, Los Angeles, Calif.
 C. P. Zepp, Sr., 136 W. 53rd St., New York, N. Y.
- J. G. Hardenbergh, 600 S. Michigan Ave., Chicago 5, Ill.
- W. R. Krill, 2656 Tremont Rd., Columbus 8, Ohio.
- W. A. Young, 157 W. Grand Ave., Chicago, Ill.
- *These officers also constitute the Committee on Program, with the executive secretary of the AVMA as chairman, ex-officio.

Council on Education

- W. L. Boyd, Chairman, Division of Veterinary Science, University Farm, St. Paul 8, Minn. (Representing Research and Education) (1952).
- *James Farquharson, Secretary, Division of Veterinary Medicine, Colorado A. & M. College, Ft. Collins, Colo. (Representing Clinical Sciences) (1950).
- *W. A. Aitken, Merrill, Iowa (Representing General Practice) (1952).
- Col. Seth C. Dildine (retired), Canal Winchester, Ohio. (Representing Military Service) (1950).
- Garth A. Edge, Provincial Department of Public Health, Toronto, Ont. (Representing Public Health) (1951).
- *W. A. Hagan, New York State Veterinary College, Cornell University, Ithaca, N. Y. (Representing Basic Sciences) (1954).
- S. W. Haigler, 7645 Delmar Blvd., St. Louis 5, Mo. (Representing Small Animal Practice) (1954).
- C. C. Hastings, Williamsville, Ill. (Representing Large Animal Practice) (1953).
- M. S. Shahan, Pathological Division, Bureau of Animal Industry, U. S. Department of Agriculture, Washington 25, D. C. (Representing Government Service) (1949).

Legislation

- J. G. Hardenbergh, Chairman, ex-officio, 600 S. Michigan Ave., Chicago 5, Ill.
- C. C. Franks, 1133 44th St., Des Moines 11, Iowa. (1953).
- George W. Gillie, 1522 House Office Bldg., Washington 25, D. C. (1950).
- G. H. Hopson, 165 Broadway, New York 6, N. Y. (1951).
- N. J. Miller, Box 335, Eaton, Colo. (1949).

Resolutions

- R. A. Hendershott, Chairman, 33 Oak Lane Ave., Trenton 8, N. J.
- J. G. Hardenbergh, Secretary, ex-officio, 600 S. Michigan Ave., Chicago 5, Ill.
- J. Gordon Anderson, 1016 9th Ave., W., Calgary, Alberta.
- H. L. Darby, 503 U. S. Court House, Fort Worth 2, Texas.
- F. E. Kitchen, Box 532, Greenville, S. Car.
- G. B. Munger, 1921 First Ave. E., Cedar Rapids, Iowa.
- R. E. Shigley, 710 2nd St. S.E., Minot, N. Dak.

^{*}These three members comprise the Executive Committee of the Council and are elected by the Executive Board; the remaining members are appointed by the president.

Biological Products

- L. R. Vawter, chairman, Department of Veterinary Science, University of Nevada, Reno, Nev. (1953).
- Glen L. Dunlap, 800 Woodswether Rd., Kansas City 6, Mo. (1951).
- G. H. Good, 304 Capitol Bldg., Cheyenne, Wyo. (1949).
- D. I. Skidmore, 4452 Volta Pl. N.W., Washington 7, D. C. (1952).
- F. H. Suits, Odessa, Mo. (1950).

Therapeutic Agents and Appliances

- Dr. Roger P. Link, Chairman, Department of Veterinary Physiology and Pharmacology, University of Illinois, Urbana, Ill. (1951).
- L. A. Gendreau, 67 Willington S., Sherbrooke, Quebec. (1952).
- R. C. Klussendorf, ex-officio, 600 S. Michigan Ave., Chicago 5, Ill.
- J. V. Lacroix, Box 872, Evanston, Ill. (1949).D. K. Detweiler, 40th and Ford Rd., Philadel-
- phia 31, Pa. (1953).
 John L. Wells, 1817 Holmes St., Kansas City 8, Mo. (1950).

Public Relations

- A. H. Quin, Jr., Chairman, 239 East 72nd Terrace, Kansas City 5, Mo. (1949).
- C. E. DeCamp, Post Rd. at Maple St., Scarsdale, N. Y. (1952).
- Clifton D. Lowe, 3429 Oakwood Terrace N.W., Washington 10, D. C. (1951).
- W. M. Coffee, La Center, Ky. (1953).
- K. G. McKay, Box 23, Berkeley, Calif. (1950).

Poultry

- John P. Delaplane, Chairman, Rhode Island State College, Kingston, R. I. (1950).
- C. A. Brandly, Department of Veterinary Science, University of Wisconsin, Madison, Wis. (1951).
- W. R. Hinshaw, 222 Rice Lane, Davis, Calif.
- Ellis E. Jones, 1451 Mirasol St., Los Angeles 23, Calif. (1953).
- A. B. Wickware, 1031 Carling Ave., Ottawa, 1st Dist., Ont. (1952).

Parasitology

- R. E. Rebrassier, Chairman, Veterinary Clinic, The Ohio State University, Columbus 10, Ohio. (1949).
- W. E. Swales, Institute of Parasitology, Macdonald College, P. O. Quebec, Que. (1950).
- D. W. Baker, New York State Veterinary College, Cornell University, Ithaca, N. Y. (1953).
- H. E. Kemper, Box 464, Albuquerque, N. Mex. (1951).
- R. D. Turk, School of Veterinary Medicine, Texas A. & M. College, College Station, Texas. (1952).

Nutrition

- Jesse Sampson, Chairman, College of Veterinary Medicine, University of Illinois, Urbana, Ill. (1952).
- A. H. Groth, Regional Laboratory, Animal Disease Research, Auburn, Ala. (1950).
- H. M. LeGard, 355 Main St. N., Weston, Ont. (1949).
- Hubert Schmidt, College Station, Texas. (1951).
 M. J. Swenson, Veterinary Research Institute,
 Iowa State College, Ames. (1953).

Registry of Veterinary Pathology Army Institute of Pathology

- W. H. Feldman, Chairman, The Mayo Founda-
- tion, Rochester, Minn. (1951).

 Major T. C. Jones, V. C., Army Institute of Pathology, Army Medical Museum, Seventh and Independence Ave. S.W., Washington. D. C. (1949).
- O. L. Osteen, Box 83, Beltsville, Md. (1950).
- Col. J. E. Ash, M.C., Scientific Director, American Registry of Pathology, Army Medical Museum, Washington, D. C. (Consulting member.)

Board of Trustees—Research Fund (Ex-Officio)

- L. M. Hurt, 203 Administration Bldg., Union Stock Yards, Los Angeles, Calif.
- J. G. Hardenbergh, 600 S. Michigan Ave., Chicago 5, Ill.
- W. R. Krill, 2656 Tremont Rd., Columbus 8, Ohio.
- W. A. Young, 157 W. Grand Ave., Chicago 10,
- C. P. Zepp, Sr., 136 W. 53rd St., New York, N. Y.

Special Committees History

- J. M. Arburua, Chairman, 26 Fell St., San Francisco, Calif.
- F. T. Candlin, 280 Madison St., Denver 6, Colo.
- B. L. Gittings, Box 4022, St. Petersburg, Fla.
 L. A. Merillat, 453 East 87th Pl., Chicago 19, Ill.
- J. R. Mohler, 1620 Hobart St., N.W., Washington 9, D. C.
- John H. Whitlock, 120 Linden Ave., Ithaca, N. Y.

Nomenclature of Diseases

- H. C. H. Kernkamp, Chairman, Division of Veterinary Science, University Farm, St. Paul 8, Minn.
- F. R. Beaudette, New Jersey Agricultural Experiment Station, New Brunswick, N. J.
- C. Lawrence Blakely, Angell Memorial Animal Hospital, 180 Longwood Ave., Boston, Mass.

- A. Merchant, Iowa State College, Ames, Iowa.
- Carl Olson, Jr., College of Agriculture, University of Nebraska, Lincoln, Neb.
- Benjamin Schwartz, Zoölogical Division, Bureau of Animal Industry, U. S. Department of Agriculture, Washington 25, D. C. (Consulting Member).
- H. C. Stephenson, New York State Veterinary College, Cornell University, Ithaca, N. Y.
- Frank Thorp, Jr., Dept. of Animal Pathology, Michigan State College, East Lansing, Mich.

Food and Milk Hygiene

- H. E. Kingman, Jr., Chairman, 350 Walnut St., Elmhurst, Ill.
- E. M. Lynn, 8052 Calumet Ave., Chicago 19, Ill. C. H. Pals, 308 E. Howell Ave., Alexandria, Va.
- B. C. Pier, 2800 Devonshire Pl., N.W., Apt. 105, Washington 8, D. C.
- H. E. Shepherd, 1515 37th St., Sacramento 16, Calif.
- James H. Steele, Veterinary Public Health Section, Communicable Disease Center, U. S. Public Health Service, Atlanta, Ga.

Diseases of Wild and Furbearing Animals

- G. S. Harshfield, Chairman, Veterinary Department, South Dakota State College, Brookings, S. Dak.
- C. R. Donham, 311 W. Oak St., W. Lafayette, Ind.
- E. M. Joneschild, 914 5th Ave., Helena, Mont.
- S. H. McNutt, Department of Veterinary Science, University of Wisconsin, Madison, Wis. W. S. Shaw, Millbrook, N. Y.

Diseases of Wild and Fur-bearing Animals

- E. R. Quortrup, Chairman, Patuxent Research Refuge, Bowie, Md.
- L. J. Goss, New York Zoölogical Park, New York 60, N. Y.
- H. F. Keagy, 550 Loring Ave., Los Angeles, Calif.
- A. C. Secord, 1105-07 Yonge St., Toronto, Ont. S. G. Stephan, 2824 Vine St., Cincinnati 19,

Ohio.

Diseases of Small Animals

- Wayne H. Riser, Chairman, Box 872, Evanston,
- C. E. DeCamp, Post Rd. & Maple St., Scarsdale, N. Y.
- L. C. Moss, Veterinary Hospital, Colorado A. & M. College, Ft. Collins, Colo.
- M. A. Northrup, 1371 Fulton St., San Francisco 17, Calif.

Motion Picture Library

- C. B. Krone, Chairman, Box 189, LaGrange, Ill. A. G. Danks, College of Veterinary Medicine, University of Illinois, Urbana, Ill.
- Jack R. Dinsmore, College of Veterinary Medicine, State College of Washington, Pullman. Wash.
- W. J. Gibbons, School of Veterinary Medicine, Alabama Polytechnic Institute, Auburn, Ala.
- L. M. Hutchings, Department of Veterinary Science, Purdue University, Lafayette, Ind.
- C. C. Morrill, College of Veterinary Medicine, University of Illinois, Urbana, Ill.

Veterinary Services

- W. T. Oglesby, Chairman, Department of Veterinary Science, Louisiana Stake University, Baton Rouge 3, La.
- Col. Seth C. Dildine (retired), Canal Winchester, Ohio.
- H. L. Foust, Department of Anatomy, Iowa
- State College, Ames, Iowa.
 C. H. Reid, 217 Pantages Bldg., West Hollywood, Calif.
- E. A. Woelffer, College of Veterinary Medicine, University of Illinois, Urbana, Ill.

National Board of Veterinary Examiners

- W. R. Krill, Chairman, 2656 Tremont Rd., Columbus 8, Ohio.
- Chas. W. Bower, 3119 Stafford St., Topeka, Kan. W. L. Boyd, University Farm, St. Paul 8, Minn. R. R. Dykstra, Kansas State College, Manhat-
- tan, Kan.
 R. A. Kelser, School of Veterinary Medicine,
 University of Pennsylvania, Philadelphia, Pa.
 - I. D. Wilson, Virginia Polytechnic Institute, Blacksburg, Va.

Code of Ethics

- S. W. Haigler, Chairman, 7645 Delmar Blvd., St. Louis 5, Mo.
- R. A. Merrill, Clara City, Minn.
- F. L. Schneider, Box 464, Albuquerque, N. Mex. D. R. Skillen, 530 Georgian Rd., Flintridge, Pasadena 2. Calif.
- R. C. Snyder, Walnut St., and Copley Rd., Upper Darby, Pa.

Joint Committee on Foods

- Louis A. Corwin, Chairman, 136-21 Hillside Ave., Jamaica, L. I., N. Y. (AAHA) (1953).
- J. G. Hardenbergh, Secretary, 600 S. Michigan Ave., Chicago 5, Ill. (AVMA) (1951).
- C. W. Bower, 3119 Stafford St., Topeka, Kan. (AAHA) (1952).
- J. B. Engle, P. O. Box 432, Summit, N. J. (AVMA) (1949).
- A. E. Wight, 3730 18th St. N.W., Washington 9, D. C. (1950).

Sub-Committee on Veterinary Items National Formulary Committee (Ten-Year Appointment Terminating in 1949)

- H. D. Bergman, Chairman, Division of Veterinary Medicine, Iowa State College, Ames, Iowa.
- R. F. Bourne, Division of Veterinary Medicine, Colorado A. & M. College, Fort Collins, Colo.
- P. W. Burns, Division of Veterinary Science, Texas A. & M. College, College Station, Texas.
- C. F. Cairy, School of Veterinary Medicine, Michigan State College, East Lansing, Mich.

Awards (Ex-Officio)

- L. M. Hurt, Chairman, 203 Administration Bldg., Union Stock Yards, Los Angeles, Calif. H. D. Bergman, Division of Veterinary Medi-
- cine, Iowa State College, Ames, Iowa.

 T. Childs, Health of Animals Division, Department of Agriculture, Ottawa, Ont.
- W. R. Krill, College of Veterinary Medicine, The Ohio State University, Columbus 10, Ohio.
- B. T. Simms, Bureau of Animal Industry, USDA, Washington 25, D. C.

Twelfth International Veterinary Congress Prize (Ex-Officio)

- L. M. Hurt, Chairman, 203 Administration Bldg., Union Stock Yards, Los Angeles 11, Calif.
- C. P. Zepp, Sr., 136 W. 53rd St., New York, N. Y.
- W. R. Krill, College of Veterinary Medicine, The Ohio State University, Columbus 10, Ohio.
- Brig. Gen. James A. McCallam, Veterinary Division, Office of the Surgeon General, U. S. Army, Washington 25, D. C.
- B. T. Simms, Bureau of Animal Industry, USDA, Washington 25, D. C.

Humane Act Award

- S. T. Michael, Chairman, 2500 16th St., San Francisco 3, Calif.
- A. E. Cameron, 231 Sunnyside Ave., Ottawa, Ont.
- G. W. Mather, Box 166, Hingham, Mass.
- W. A. Young, 155 W. Grand Ave., Chicago 10, Ill.

Inter-American Veterinary Congress

- B. T. Simms, Chairman, Bureau of Animal Industry, U. S. Department of Agriculture, Washington 25, D. C.
- T. Childs, Health of Animals Division, Department of Agriculture, Ottawa, Ont.
- F. N. Camargo, Ajuseo 2, Villa Obregon, Mexico City, Mexico.

- Brig. Gen. J. A. McCallam, Veterinary Division, Office of the Surgeon General, U. S. Army, Washington 25, D. C.
- And the foreign corresponding secretaries of the South American republics.

Research Council

- ANATOMY AND HISTOLOGY.—L. E. St. Clair, Secretary, College of Veterinary Medicine, University of Illinois, Urbana, Ill. (1949).
- BACTERIOLOGY (IMMUNOLOGY AND BIOLOGIC THER-APY).—L. C. Ferguson, 2456 Lexington Ave., Columbus 3, Ohio. (1950).
- BIOCHEMISTRY AND ANIMAL NUTRITION.—George H. Hart, Division of Animal Husbandry, University Farm, Davis, Calif. (1950).
- Large Animal Medicine.—J. F. Bullard, Department of Veterinary Science, Purdue University, Lafayette, Ind. (1950).
- LABOE ANIMAL SURGERY.—A. G. Danks, College of Veterinary Medicine, University of Illinois, Urbana. (1951).
- Parasitology.—W. E. Swales, Institute of Parasitology, Macdonald College, P. O. Quebec, Que. (1951).
- Pathology.—L. M. Roderick, School of Veterinary Medicine, Kansas State College, Manhattan, Kan. (1950).
- Physiology and Pharmacology.—H. H. Dukes, New York State Veterinary College, Cornell University, Ithaca, N. Y. (1950).
- POULTRY PATHOLOGY.—C. A. Brandly, Department of Veterinary Science, University of Wisconsin, Madison, Wis. (1951).
- SMALL ANIMAL MEDICINE.—C. P. Zepp, Sr., 136 West 53rd St., New York, N. Y. (1949).
- SMAIL ANIMAL SURGERY.—C. F. Schlotthauer, Vice-Chairman, Division of Experimental Medicine, The Mayo Foundation, Rochester, Minn. (1949).
- VETERINARY HYGIENE.—Andrew L. MacNabb, Ontario Veterinary College, Guelph, Ont. (1949).
- VIRUS DISEASES.—R. A. Kelser, School of Veterinary Medicine, University of Pennsylvania, Philadelphia, Pa. (1949).
- X-RAY.—M. A. Emmerson, Chairman, Division of Veterinary Medicine, Iowa State College, Ames, Iowa. (1951).
- MEMBER-AT-LARGE.—Hadleigh March, Agricultural Experiment Station, Bozeman, Mont. (1951).

Representatives

- Advisory Board, Horse and Mule Association of America.—T. A. Sigler, Greencastle, Ind. (annual assignment).
- AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.—L. M. Hurt, 203 Administration

- Bldg., Union Stock Yards, Los Angeles 11, Calif. (annual assignment).
- ARMY MEDICAL LIBRARY, HONORABY CONSULTING BOARD.—J. G. Hardenbergh, 600 S. Michigan Ave., Chicago 5, Ill.
- INTER-ASSOCIATION COUNCIL OF ANIMAL DISEASE AND PRODUCTION.—R. C. Klussendorf, 600 S. Michigan Ave., Chicago 5, Ill.
- NATIONAL LIVESTOCK LOSS PREVENTION BOARD.— W. E. Logan, 204 Federal Bldg., Topeka, Kan.
- NATIONAL RESEARCH COUNCIL (Division of Biology and Agriculture,)—E. P. Johnson, Box 593 Blacksburg, Va. (1949).
- NATIONAL RESEARCH COUNCIL (Division of Medical Sciences).—H. D. Bergman, Iowa State College, Ames, Iowa. (1950).
- NATIONAL SOCIETY FOR MEDICAL RESEARCH.— J. G. Hardenbergh, 600 S. Michigan Ave., Chicago 5, Ill.
- UNITED STATES PHARMACOPEIAL CONVENTION, XII.—H. E. Moskey, Food and Drug Administration, Washington 25, D. C. (to serve until 1950).

Program (Ex-Officio)*

This committee is composed of the chairmen and secretaries of the six sections with the executive secretary acting as the chairman.

*Pursuant to article XII, section 1, part 4 of the Administrative By-Laws, as amended at the seventy-eighth annual meeting.

Resident State Secretaries

- Alabama.—I. S. McAdory, Alabama Polytechnic Institute, Auburn.
- Arizona.—Robert E. McComb, Jr., Rt. 5, Box 514, Phoenix.
- Arkansas.—J. D. Hendrickson, 105 Englewood Rd., Little Rock.
- California.—C. E. Wicktor, 203 Administration Bldg., Union Stock Yards, Los Angeles 11, Calif
- Colorado.—W. G. Blake, 2410-8th Ave., Greeley.
 Connecticut.—Edwin Laitinen, 993 N. Main St.,
 West Hartford.
- Delaware.—C. C. Palmer, Wolf Hall, University of Delaware, Newark.
- District of Columbia.—Lawrence O. Mott, Animal Disease Station, Department of Agriculture, Beltsville, Md.
- Florida.—Karl R. Owens, R.F.D. 3, Box 58M, Gainesville.
- Georgia.—C. C. Rife, 420 Edgewood Ave., Atlanta.
- Idaho.—A. P. Schneider, 108 Capitol Bldg., Boise.
- Illinois.—A. G. Misener, 6448 N. Clark St., Chicago.
- Indiana.—Frank R. Booth, Rt. 5, E. Jackson Blvd., Elkhart.

- Iowa.—J. H. Krichel, 1914 Main St., Keokuk.
 Kansas.—E. E. Leasure, School of Veterinary
 Medicine, Kansas State College, Manhattan.
- Kentucky.-Allen S. Barnes, Box 231, Frankfort.
- Louisiana.—C. M. Heflin, Box 1933, Baton Rouge.
- Maine.-L. B. Denton, 59 River St., Dover-Foxcroft.
- Maryland.—A. L. Brueckner, 4111 Colesville Rd., Hyattsville.
- Massachusetts.—L. A. Paquin, Box 225 Webster.
- Michigan.—Frank Thorp, Jr., Anatomy Bidg., East Lansing.
- Minnesota.—W. L. Boyd, University Farm, St. Paul 8.
- Mississippi.—Wm. L. Gates, P. O. Box 417,
- Clarksdale.

 Missouri.—L. G. Dunlap, 800 Woodswether Rd.,
- Kansas City.

 Montana.—A. M. Jasmin, Veterinary Research
 Laboratory, Bozeman.
- Nebraska.—Paul Matthews, 4901 South 33rd St., Omaha.
- Nevada.—Edward Records, University of Nevada, Reno.
- New Hampshire.—Carl L. Martin, 85 Charles
- St., Rochester.

 New Jersey.—J. R. Porteus, P. O. Box 938,
- Trenton 5.

 New Mexico.—S. W. Wiest, P. O. Box 75, Santa
- New York.—John J. Regan, 1231 Gray Ave.,
- North Carolina.—M. M. Leonard, 123 Biltmore Ave., Ashville.
- North Dakota.—T. O. Brandenburg, Livestock Sanitary Board, State House, Bismarck.
- Ohio,-C. R. Cole, 1796 Kenny Rd., Columbus 8. Oklahoma.-O. E. Robinson, Bixby.
- Oregon.—E. M. Dickinson, Dept. of Veterinary Medicine, Oregon State College, Corvallis.
- Pennsylvania.—Samuel Abramson, 3400 N. 23rd St., Philadelphia 40.
- Rhode Island.—J. S. Barber, 560 Pleasant St., Pawtucket.
- South Carolina.—E. P. Caughman, Jr., 900 Harden St., Columbia 5.
- South Dakota.—R. M. Scott, 1501 S. Main Ave., Sioux Falls.
- Tennessee.—Dennis Coughlin, 1713 Yale Ave., Knoxville 16.
- Texas.—Leon G. Cloud, 2833 W. 7th St., Ft. Worth.
- Utah.—G. H. Ehlers, 212 Livestock Exchange Bldg., Ogden.

ME

- Vermont.—Guy N. Welch, 43 Union St., North-field.
- Virginia.—Taylor P. Rowe, 3320 W. Broad St., Richmond.
- Washington.-M. O. Barnes, 203 Federal Bldg., Olympia.
- West Virginia.—S. E. Hershey, 117 Court St., Charleston 1.
- Wisconsin.—J. T. Schwab, Chief, Livestock Sanitation Division, State Capitol, Madison.
- Wyoming.-O. E. Bunnell, 728 Big Horn, Worland

Resident Territorial Secretaries

- Alaska.—E. F. Graves, P. O. Box H, Palmer. Canal Zone.—Paul H. Dowell, Box 2022, Christobal.
- Hawaii.—Paul T. Nomura, 767 Alta Moana,
- Puerto Rico.—O. A. López-Pacheco, P. O. Box 155, Hato Rey.
- Philippine Islands.—J. B. Aranez, Tanavan, Batangas.

Resident Provincial Secretaries

- Alberta.—J. C. Wainwright, 26 Central Bldg., Calgary.
- British Columbia .- J. G. Jervis, Milner.
- Manitoba.—R. H. Lay, 613 Dominion Public Bldg., Winnipeg.
- New Brunswick.—Adam T. McLean, Box 402, Moncton.
- Nova Scotia.—E. E. I. Hancock, 79 Exhibition St., Truro.
- Ontario.—W. Moynihan, 366 Keele St., Toronto.
- Prince Edward Island.—E. S. Notting, Box 489, Charlottetown.
- Quebec .- Joseph Dufresne, Oka.
- Saskatchewan.—Norman Wright, University of Saskatchewan, Saskatoon.

Foreign Corresponding Secretaries

- Antigua.—Dr. L. R. Hutson, Antigua, B.W.I. Argentina.—Willy Rucks, Valle 1314, Buenos Aires.
- Australia.-J. D. Steele, University of Sydney, N.S.W.
- Bahamas.-Albert Soltys, Box 28, Nassau.
- Bermuda.—J. W. Sutherland, Fairylands, Pembroke West.

- Bolivia.—W. D. Shipley, U. S. Ground Mission, c/o American Consulate, Cochobomba.
- Brazil.—A. V. Machado, Rua Paracatu 11 F8, Belo Horizonte, Minas.
- Chile.—Julio San Miguel, J. J. Vallejos, 1415, Santiago.
- China.—Ching Sheng Lo, c/o BAI, Ministry of Agriculture & Forestry, Chungking.
- Colombia.—R. H. Almanza, Carrera 17, No. 23-82, Bogota.
- Cuba.—R. Lagarde, Calle 23, No. 802, Vedado, Hayana.
- Dutch Guiana.—J. Frickers, Gravenstratt 40 b, Paramaribo.
- Ecuador .- C. G. Sotomayor, Guayaquil.
- Egypt.—J. E. B. Aghion, 20 Sharia Senan, Pasha, Zeitun.
- Eire.—Wm. Kearney, Veterinary College, Ballsbridge, Dublin, S. E. 4.
- England.—H. W. Steele-Bodger, 28 Litchfield St., Tamworth, Staffordshire.
- France.—Pierre Goret, 153 Avenue de Neuilly, Neuilly-Sur-Seine.
- Iceland.—Prof. N. Dungal, University of Reykjavik, Reykjavik.
- India.—A. W. McClurkin, Allahabad Agricultural Institute, Allahabad, U. P.
- Mexico.—Luis Santa Maria, Apartado Postal No. 2067, Mexico, D. F.
- New Zealand.—D. J. Smith, Te Aroha, Morrins-
- Palestine.—Simon Bornstein, 20 Lassale, Tel Aviv.
- Peru.—Daniel A. Tovar, Apartado 160, Huan-
- Scotland.—Robert D. MacKintosh, Cairnhill, Huntley, Aberdeenshire.
- 8t. Kitts.—Victor A. Hall, Bassaterre, B.W.I. Siam.—Charas Suebsaeng, Department of Animal Development, Ministry of Agriculture, Bangkok.
- Spain.—Juan Talavera, Calle Iturbe 14, Madrid. Sweden.—Gustav Denalius, Linkoping.
- Switzerland .- W. Frei, Zurich.
- Trinidad.—Dr. H. V. M. Metivier, Dept. of Agriculture, Port of Spain, B.W.I.
- Union of South Africa.—G. Martinaglia, Abattoir and Livestock Dept., Pim St., Newtown, Johannesburg.
- Uruguay.—Guillermo P. Lockhart, Presidente Berro 2730, Montevideo.
- Venezuela.—Claudio E. Muskus, P. O. Box 993, Caracas.